NEW YORK STATE

GRADE 4

ELEMENTARY-LEVEL

SCIENCE TEST

Manual for Administrators and Teachers

2017 Written Test
Performance Test, Form A

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
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Contents

General Features of the Grade 4 Elementary-Level Science Test 1

Information for School Administrators 2

General Information 2
Test Forms 2
Scanning of Machine-Scorable Answer Sheets 2
Reporting Test Results 2
Administration Schedule 3
Students to Be Tested 3
Testing Accommodations 3
Security of the Tests 6
Test Certificates 7
Emergency Supply of Test Materials 7

Test Preparations and Other Guidelines 8

Administration of the Tests 8
Orientation of Test Administrators 8
Preparation of Students for Testing 8
Selecting the Testing Room(s) 8
Preparation of the Testing Room(s) 8
Supervision of Students 9
Determining the Need for Academic Intervention Services 11
Evaluating School Results on the Grade 4 Elementary-Level Science Test 12
Recording Test Scores and Storing Student Answer Papers 12
Individual Student Reports 12
Review of Answer Papers by Students and Parents 12
Online Submission of Teacher Evaluations of the Test to the Department 12
Return of Tests and Scoring Materials to the Department 12
Department Contacts 14

General Test Administration Procedures 15

Test Materials 15
Test Administration Time 16

Administering and Scoring the Written Test 16

Detailed Directions for Administering the Written Test 16
Scoring the Written Test, Parts I and II 20
Rating the Written Test, Part II 20
Organizing the Rating Process 21

Administering and Rating the Performance Test 22

Preparation 22
Preparing Each Station 25
Detailed Directions for Administering the Performance Test 32
Rating the Performance Test 37
Organizing the Rating Process 37

Finality of Teacher Scoring Committee's Scores 38
Reporting Irregularities and/or Misadministrations 39
Mandatory Reporting of Testing Improprieties by Adults 39
Coding of Invalid Tests 40
Circumstances that Should Not Be Reported as Administrative Error 40
Appendix I: Materials Needed to Administer the Performance Test, Form A 41
Appendix II: Comparison of Possible Performance Test Sites 43
Appendix III: Test Administrator's Record Sheet 45
Appendix IV: Station 3—Ball and Ramp Place Mat 47
Appendix V: Test Storage Certificate, Deputy and Proctor Certificate, and Test Scoring Certificate 51
Appendix VI: Information on Ungraded Students 59
Appendix VII: Suppliers for Grade 4 Elementary-Level Science Performance Test Kits 60
Appendix VIII: Performance Levels Chart 61

General Features of the Grade 4 Elementary-Level Science Test

The Regulations of the Commissioner of Education provide that an elementary-level science test is to be administered in Grade 4 to serve as a basis for determining students' needs for academic intervention services in science. The Grade 4 Elementary-Level Science Test is designed to measure the content and skills contained in the *Elementary-Level Science Core Curriculum, Grades K–4*. The core curriculum is based on the *New York State Learning Standards for Mathematics, Science, and Technology (Elementary-Level)*.

The Grade 4 Elementary-Level Science Test consists of two required components: a Written Test and a Performance Test. Students who are in attendance and who respond to at least one item on both the Written Test and the Performance Test will receive a valid score and a valid performance level. The Written Test consists of multiple-choice and open-ended questions and requires about one hour to administer. The Performance Test (Form A) consists of hands-on tasks set up at three stations and requires about 75 minutes to administer. All three stations of the Performance Test must be administered in one continuous session.

The first section of this manual contains information of special interest to administrators. Subsequent sections contain information on test preparations and other guidelines along with directions for administering and scoring the Written and Performance Tests.

Information for School Administrators

General Information

All school personnel who will be involved in the administration and scoring of the Grade 4 Elementary-Level Science Test should have a copy of, and be familiar with, the information in this manual. The manual may be photocopied by the school as needed. In addition, please check the Office of State Assessment's (OSA's) web site periodically at http://www.p12.nysed.gov/assessment/science/science-ei.html for updates concerning this test. Schools may submit questions concerning the administration of the Grade 4 Elementary-Level Science Test via e-mail to OSA at emscassessinfo@nysed.gov.

Pursuant to Section 102.3 of the Regulations of the Commissioner of Education, "Building principals are responsible for administering department examinations and maintaining the integrity of examination content and programs, in accordance with directions and procedures established by the commissioner."

Test Forms

Written Test: The Written Test booklet has two parts and must be administered in one sitting. Part I contains multiple-choice questions, and Part II contains open-ended questions. The test is not timed. Most students will complete the Written Test in approximately 45–60 minutes of working time. In addition, the test administrator will need approximately 15 minutes to give directions to students. As long as they are working productively, students should be allowed as much time as they need only **within the confines of the regular school day** to complete the Written Test. Schools are not expected to extend the school day in order for students to complete the Written Test. In addition, schools may not extend the Written Test beyond its scheduled day unless the student has multiple-day testing as a specified testing accommodation in his or her Individualized Education Program (IEP) or Section 504 Accommodation Plan (504 Plan). The Department will provide a new form of the Written Test each year. All schools must use an answer sheet developed by a Regional Information Center (RIC) or large-city scanning center. Students must use this answer sheet to record their responses to the multiple-choice questions. Students write their answers to the questions in Part II of the test in the test booklet.

Performance Test, Form A: The Performance Test consists of tasks at three stations and must be administered in one sitting. Each station requires 15 minutes of testing time, for a total testing time of 45 minutes. Additional time is needed to provide instructions to students and for students to move between stations. Allot at least 75 minutes for administration of the Performance Test. The Performance Test is hand scorable only. Students write their answers to the questions on the Performance Test in the test booklet.

Scanning of Machine-Scorable Answer Sheets

It is the school's responsibility to make the necessary arrangements for scoring the test and reporting data to the Student Information Repository System (SIRS). All schools, public, nonpublic, and charter, must contract with a RIC or large-city scanning center for answer sheets, scanning, and reporting services. The school must send answer sheets to the RIC/large-city scanning center after the rating of the Written Test Part II and the Performance Test are completed.

Some schools will have two separate answer sheets, one for the Performance Test and one for the Written Test. If this is the case, both must be sent to the RIC/large-city scanning center if that is part of their arrangement. Schools may not require students to record their responses for the same multiple-choice questions on more than one answer sheet.

Reporting Test Results

Data for all schools must be reported through the SIRS. For more information about reporting results, school administrators should contact their local RIC or their large-city scanning center. **Schools must not send completed answer sheets to the Department**.

Administration Schedule

The Grade 4 Elementary-Level Science Performance Test must be administered between May 24 and June 2, 2017. The specific dates when the test is administered are a local decision. The Written Test must be administered on June 5, 2017. Students who are absent on the administration dates must be tested when they return to school, but no later than June 2 for the Performance Test and no later than June 7 for the Written Test. Results for all students must be included on the reports submitted to the Department. Answer sheets for all students must be submitted to the scanning center by June 15, 2017.

Students to Be Tested

Except as noted below, all public and charter school students in Grades 3–8 must take all State assessments administered for their grade level. This includes students who have been retained in these grades. The birth dates of ungraded students with disabilities should be used to determine who must be tested and which grade-level test they will take (see Appendix VI). Nonpublic schools are also encouraged to participate and are to follow the same guidelines for each grade-level test they are administering. When determining which students will participate in these tests, be sure to consider students who attend programs operated by the Boards of Cooperative Educational Services (BOCES) as well as any other programs located outside the district.

- *Students with Disabilities.* The Committee on Special Education (CSE) must decide for each student, on a case-by-case basis, whether the student will participate in the general State assessment or in the New York State Alternate Assessment (NYSAA) for students with severe disabilities. The CSE's decision must be documented on the student's IEP. The criteria that the CSE must use to determine eligibility for the NYSAA are available at the web site http://www.p12.nysed.gov/assessment/nysaa/. The Grade 4 Elementary-Level Science Test answer sheets for students participating in the NYSAA should be coded as eligible for the Alternate Assessment.
- *Medically Excused.* A student may be medically excused from testing if documentation from a medical practitioner is obtained and kept on file at the school, indicating that the student is too incapacitated to test at the school, at home, or in a medical setting. When reporting assessment data to the Department for a student who is medically excused, the principal must report the student's results with an Assessment Standard Achievement Code of "93" in SIRS.

The provisions of the No Child Left Behind Act (NCLB) do not permit any exemption of English Language Learners from the Grade 4 Elementary-Level Science Test. All English Language Learners in Grade 4 must take the Grade 4 Elementary-Level Science Test. This test is available in Chinese (Traditional), Haitian Creole, and Spanish. Information about administering these translated editions is included on page 15 under "Test Materials." The test can be translated orally into other languages for those English Language Learners whose first language is one for which a written translation is not available from the Department. Schools are permitted to offer English Language Learners specific testing accommodations when taking State tests to ensure valid and reliable test results (see page 5).

Testing Accommodations

Students Who Incur Disabilities Shortly Before Test Administration

Principals may provide accommodations when testing general education students who incur an injury (e.g., broken arm) or experience the onset of either a short- or long-term disability (either cognitive or physical) within 30 days prior to test administration. Eligibility for such accommodations is based on the principal's professional judgment. The principal may confer with CSE/504 Multi-Disciplinary Team members, the school physician, or other school personnel in making such a determination. These accommodations are limited to the following:

- extending the time limit for a test,
- administering the test in a special location,
- recording the student's answers in any manner, and
- reading the test to a student (only for students whose vision is impaired).

Prior permission need not be obtained from the Department for the principal to authorize these testing accommodations for general education students. However, a full written report concerning each authorization must be sent to OSA via fax to 518-474-1989. The report must be on **school letterhead**, must be signed by the principal, and must include the following information:

- the title of the test,
- a brief description of the student's injury or disability, and
- a listing of the accommodations that were authorized by the principal.

If the student is expected to continue to need testing accommodations, the principal must immediately make the appropriate referral for the development of an IEP or a 504 Plan.

Students with Disabilities

In general, students with disabilities must be provided with the testing accommodations specified in their IEPs or 504 Plans when taking this test. It is the principal's responsibility to ensure that this occurs and that those staff who will be providing these testing accommodations are appropriately trained. Plan all necessary arrangements for implementing testing accommodations well in advance of the test dates.

The Department's Office of Special Education provides more information on test access and accommodations for students with disabilities on its web site at http://www.p12.nysed.gov/specialed/publications/policy/testaccess/policyguide.htm. If you have questions on this topic for which you are unable to find answers on the web site, you may contact that office via e-mail to speced@nysed.gov.

Use of Scribes or Tape Recorders and Large-Type or Braille Editions

Instead of using a scribe, the Department encourages the use of a word processor (with dictionary disabled), as most students have some experience with computers, and word processing allows the student more control over his or her environment, fosters independence, and is less labor-intensive than using a scribe. However, the use of scribes and the use of tape recorders are allowable accommodations for the Grade 4 Elementary-Level Science Test. Note the following procedures for scribing:

- The scribe must record word-for-word what the student dictates or records.
- The scribe must use lined paper and must write on every other line.
- The student must read the complete dictation/transcription and indicate on the skipped lines any further changes to be transcribed.
- The scribe must then transfer the student's completed response into the test book exactly as dictated or recorded and should attach the lined paper with the student's dictation to the back of the test booklet, preferably by stapling, to ensure against the student's response being lost.

For students who use large-type or braille editions of the tests, or large-type answer sheets, or have a testing accommodation allowing the circling of answers in the test book, teachers should transcribe the students' responses onto regular test answer sheets and test books exactly as dictated or recorded.

Use of Tablets

In order for students to use school-provided tablets during any part of the 2017 Elementary-Level Science Test, schools must receive prior written approval from the Department. **No personal tablets are allowed.**

Format Changes

Any format changes to the test to be made by the school, such as the re-spacing of questions, enlargement beyond the standard large-type edition provided, colorization, etc., must receive prior written approval from the Department. Note that the reformatting of State assessments may never change the wording of questions, nor may additional examples be included.

In order for the Department to process requests for reformatting by the school, requests for approval should be submitted to OSA at least one week before the first scheduled date of the test administration. Requests should include a letter on school letterhead from the school signed by the school principal. Requests may be faxed to 518-474-1989. Department approvals will be provided by fax. However, regardless of approval, under no circumstances may the shrink-wrapped test packages of State assessments be opened prior to the morning of the day that the test is to be administered in the school.

English Language Learners

Schools may provide the following testing accommodations to English Language Learners:

- *Time Extension:* Schools may extend the test time for English Language Learners. Principals may use any reasonable extensions, such as "time and a half" (the required testing time plus one-half of that amount of time), in accordance with their best judgment about the needs of the English Language Learners. Principals should consult with each student's classroom teacher in making these determinations.
- *Separate Location:* Schools are encouraged to provide optimal testing environments and facilities for all students. They may administer State tests to English Language Learners individually or in small groups in a separate location.
- *Bilingual Dictionaries and Glossaries:* English Language Learners may use bilingual dictionaries and glossaries when taking this test. The bilingual dictionaries and glossaries may provide **only** direct translations of words. Bilingual dictionaries or glossaries that provide definitions or explanations are **not** permitted.
- *Translated Editions:* English Language Learners may be provided with a translated edition of the Grade 4 Science Test. This test is available in Chinese (Traditional), Haitian Creole, and Spanish. In addition, English Language Learners may use an English and an alternative language edition of this test simultaneously. However, they should be instructed to record all of their responses in only one of the two editions. The alternative language edition used by the student should be indicated on the student's answer sheet.
- *Oral Translation for Lower Incidence Languages.* Schools may provide English Language Learners with an oral translation of this test when there is no translated edition provided by the Department. This accommodation is permitted for State examinations in all subjects **except** English. All translations must be oral, direct translations of the English editions. Written translations are not allowed. No clarifications or explanations may be provided. Translators should receive copies of the English editions of the tests *one hour prior to* administration. The Department's Office of Bilingual Education and Foreign Language Studies (phone: 518-474-8775) and the Regional Bilingual Education Resource Networks (RBE-RNs) can assist schools in locating suitable translators. A list of RBE-RNs is available at http://www.p12.nysed.gov/biling/bilinged/betac.html.
- *Writing Responses in the Native Language.* English Language Learners making use of alternative language editions or of oral translations of this test may write their responses to the open-ended questions in their native language. Scoring the tests is the responsibility of the school. However, the Department's Office of Bilingual Education and World Languages and the RBE-RNs can assist schools in locating persons who can translate the students' responses into English to facilitate scoring of the answer papers.

Former English Language Learners

Schools may provide the testing accommodations listed above under the heading "English Language Learners" to Former English Language Learners who met the exiting criteria specified in Part 154-2 of the Regulations of the Commissioner of Education and were exited from English Language Learner status following their participation in one of the two most recent administrations (Spring 2015 or Spring 2016) of the New York State English as a Second Language Achievement Test (NYSESLAT). Such students either achieved an overall level of Proficient on the NYSESLAT or achieved an overall level of Expanding on the most recent administration of the NYSESLAT and scored at Level 3 or higher on the New York State Common Core Grades 3–8 English Language Arts Test or earned a score of 65 or higher on the Regents Examination in English Language Arts (Common Core).

These accommodations may not be provided to Former English Language Learners who were identified as English language proficient prior to the 2015 NYSESLAT administration. For additional guidance on identification of Former ELLs, see: http://www.nysed.gov/bilingual-ed/schools/former-english-language-learnermultilingual-learner-services.

Security of the Tests

Prior to Testing

Secure test materials will arrive about one week before testing at the secure facility designated by the principal via the online Examination Request System. Prior to these delivery dates, the principal should make arrangements to be notified when the test materials arrive.

Safeguarding Test Materials

The sealed packages of secure test materials must be stored in a secure place at the location indicated on the *Test Storage Plan* submitted to the Department. As soon as practical after delivery, an inventory of the test materials must be conducted. The sealed packages of secure test materials must be placed back inside the secure location immediately after the inventory is completed. The school principal must notify the Department in writing via fax to 518-474-1989 if any of the packages of secure test materials are not properly sealed when received. The sealed packages of secure test materials must not be removed from the secure location, except for the inventory. The sealed packages of secure test booklets may **not** be opened until the test administration date, and then just early enough to permit the distribution of booklets prior to the scheduled starting time.

All Written Test booklets, both used and unused, and all used answer sheets must be held secure from the date the school receives its shipment of test materials until 3:00 p.m. on June 7, 2017, at which time the Rating Guide will be posted on the Department's web site at http://www.p12.nysed.gov/assessment/. While schools may score the student answer papers before the end of this period, raters are cautioned not to discuss the test content and rating criteria except during scoring sessions. Once the Department-designated test administration period has ended, the Written Test materials are no longer considered secure.

All Performance Test materials must be kept secure at all times except during the actual administration and scoring of the Performance Test. The same Performance Test (Form A) will be administered for several years. All Performance Test materials **except** used student test booklets and Performance Test Station Diagrams are to be returned to the Department.

To minimize the number of testing irregularities, principals should conduct a review of the test administration procedures prior to each test administration with all faculty and staff who will be involved in the test administration and scoring. In addition, to preserve the integrity of the test materials, advise all teachers administering and scoring this test that they are not to discuss test questions or other specific test content online via e-mail or LISTSERV or through any other electronic means. Teachers and test administrators may not use cell phones or other photographic devices to duplicate test materials, and should keep their own communication devices put away during testing, using them only in emergency situations. Please note that shrink-wrapped packages of test books cannot be opened prior to the distribution of tests to students.

Test Certificates

The *Test Storage Certificate*, the *Deputy and Proctor Certificate*, and the *Test Scoring Certificate* must be completed and signed by all of the appropriate parties following the administration and scoring of the Performance Test and again following the administration and scoring of the Written Test. Both sets of signed certificates must be retained in the school's files for one year. Copies of these certificates can be found in Appendix V. The *Test Scoring Certificate* may be copied and **must** be completed for each test administered. All scorers for each test and the principal are required to sign this form to indicate compliance with all scoring procedures as outlined in the scoring keys and rating guides for each test.

Emergency Supply of Test Materials

All shipments of secure test materials should be inventoried immediately after delivery and before being placed in secure storage. After taking inventory:

1. If you determine that any items listed on your shipping notice are **missing** from your shipment, circle the item(s) and quantity that are missing on the notice and fax the corrected shipping notice to the Department's Operations Group at 518-474-2021. (No cover sheet is necessary.) The missing item(s) will be sent to your school's storage site.

2. If the school requires items that were **not originally requested**, or items necessary to accommodate students of whose needs the school was not previously aware, contact the Department's Operations Group by sending a fax to 518-474-2021. The Operations Group will determine whether the regional center has the materials necessary to satisfy the additional request. After contacting the Operations Group, the school should contact the official in charge of the regional center to arrange pickup of test materials on the day of test administration.

    - The official school representative picking up secure test material must present to the regional center official a photo ID and a letter of authorization signed by the principal, listing the materials to be picked up. This letter, authorizing the school representative to pick up test materials, must be written on school stationery. (**Note:** Secure materials can be obtained from the regional center only on the day that they will be administered.)
    - The school representative must countersign the authorization letter and leave it with the regional center official before the emergency supply of materials can be released.
    - Information on regional centers is available at http://www.p12.nysed.gov/assessment/ei/eigen.html.

Please note: Performance test material will not be sent to regional centers, only to schools.

Test Preparations and Other Guidelines

Administration of the Tests

To ensure that the Grade 4 Elementary-Level Science Test provides an accurate measure of student achievement, both students and teachers should be properly prepared for its administration. This manual provides recommendations for preparing students to take the tests. School personnel who administer the Written and Performance Tests must be familiar with the test materials and the directions for administration provided in this manual.

Orientation of Test Administrators

This manual is not secure; copies of this publication should be distributed to teachers in advance of the administration date(s) so that they may familiarize themselves with the procedures for administering the test. Schools may make photocopies of this publication if necessary. It is also available on the Department's web site at http://www.p12.nysed.gov/assessment/manuals/.

In addition, schedule an orientation prior to the testing dates to enable test administrators to become adequately prepared. The orientation should include direct hands-on experience with the Performance Test if the test administrators have not had previous experience with that component of the test. BOCES or large-city central offices may provide assistance for conducting such orientation sessions.

Note regarding test security: Allow access to the Performance Test materials only to those who are scheduled to administer the Performance Test, conduct the orientation, or rate the test. **These materials must remain under strict security conditions at all times to preclude access to the test materials by students and other unauthorized persons.**

Preparation of Students for Testing

The administration of the test should be announced to students before the date that the test is scheduled to be administered. All announcements should be made in such a way as to increase the students' interest in the test without causing them to become overly anxious. In addition, parents should be informed of the dates of testing and the purpose of the tests. Parents should be asked to encourage students to do their best on the test and to ensure that students are well rested on the days of testing. Students should be familiar with the general types of questions on the test and the procedures that they should follow when recording their answers to the test questions. Previous editions of the Written Test that feature questions similar to those that will be on this year's test may be accessed on the Department's web site at http://www.nysedregents.org/Grade4/Science/.

Selecting the Testing Room(s)

Arrangements for administering the tests should interfere as little as possible with the normal school routine. The Written Test may be administered in the students' regular classroom, or classes may be arranged into smaller or larger groups, at the convenience of the school. The Performance Test need only be set up in one location. For buildings with more than one class of Grade 4 students, classes should cycle through the testing area one at a time. Each student must take all three stations in one continuous session. Schools with more than one class of Grade 4 students are permitted to administer the Performance Test to each class on different days within the testing period. Suggestions for selecting an appropriate testing site for the Performance Test are provided in the section of this manual entitled "Administering and Rating the Performance Test" (see pages 22–23) and in Appendix II.

Preparation of the Testing Room(s)

The room(s) in which the tests are administered should be well lighted, well ventilated, and quiet. Make preparations before the testing period to keep noise and other distractions to a minimum. Place a "Do Not Disturb" sign on the door to prevent interruptions. If tests are to be administered in a classroom, clear desks and shelves under the desks of all books, papers, and other materials. Completely cover or remove from the walls all charts and blank or completed graphic organizers

pertinent to science and all board work. Make arrangements in advance to seat the students so that each student will be clearly visible to the proctor at all times and so that there will be the least possible opportunity for any communication between students. Seating of students in alternate rows is recommended.

Supervision of Students

Unauthorized Materials

Students should be under close supervision at all times during the administration of the tests and may not use any unauthorized notes, printed materials, scrap paper, or tools.

Use of Communications Devices

All students are prohibited from bringing cell phones and certain other electronic devices, as defined in the script below, into a classroom or other location where a State test is being administered. Test proctors and school officials shall retain the right to collect and hold any prohibited electronic devices prior to the start of the test administration. Admission to the test shall be denied to any student who is in possession of a cell phone or other prohibited electronic device and refuses to relinquish it.

At the beginning of each test session, proctors must read the following statement to all students taking State tests:

You cannot have any communications device, including a cell phone, with you during this test or during any breaks (such as a restroom visit). Such devices include, but are not limited to:

- Cell phones
- iPods and MP3 players
- iPads, tablets, and other eReaders
- Personal laptops, notebooks, or any other computing devices
- Cameras, other photographic equipment, and personal scanning devices
- Wearable devices/smart wearables, including smart watches and health wearables with a display
- Headphones, headsets, or in-ear headphones such as earbuds, and
- Any other device capable of recording audio, photographic, or video content, or capable of viewing or playing back such content, or sending receiving text, audio, or video messages

If you brought any of these items to the building today, and have not already stored it in your locker or turned it over to me or a school official, you must give it to me now. You may not keep your cell phone or any of these items with you, or near you, including in your pockets, backpack, desk, etc. If you keep a cell phone or any of these items with you, your examination will be invalidated and you will get no score. Is there anyone who needs to give me any of these items now?

[*Proctor: repeat list of devices.*]

This is your last opportunity to do so before the test begins.

Any student observed with any prohibited device while taking a State test must be directed to turn the device over to the proctor immediately. To allow for all possible outcomes of procedural due process, the student should be allowed to complete the test. The incident must be reported promptly to the school principal. If the student had a prohibited device in his or her possession during the test administration, the principal must invalidate the student's test score (no score may be calculated for that student), and report the incident to OSA.

The incident must be promptly reported, in writing, to OSA by fax to 518-474-1989 or by e-mail to emscassessinfo@nysed.gov, as is the case for all student-related testing irregularities, misadministrations, or other violations of State testing policy and procedures.

Note: Some students with disabilities may use certain recording/playback devices **only if** this accommodation is specifically required as a provision of the student's IEP or 504 Plan. In addition, a student may be allowed to retain an otherwise prohibited device in his or her possession if there is documentation on file at the school from a medical practitioner that the student requires such a device during testing. Without such documentation, the general policy on communications devices as provided above is in effect, and the school may not allow the student to retain any such equipment while testing.

Aid to Students

No one, under any circumstances, may interpret or explain test questions to students, nor may anyone review or comment to the student about the correctness or sufficiency of the student's response while the test is in progress. In response to inquiries by students concerning the meaning or interpretation of test questions, proctors should advise students to use their own best judgment. Teachers may give students assistance only in the mechanics of taking the test, such as understanding that their multiple-choice responses must only be recorded on the answer sheet and their constructed responses must be recorded in the test book.

Temporary Absence from Testing Room

No student may be permitted to leave and then return to the testing room during any part of the test unless the student is accompanied by a proctor for the duration of his or her absence from the testing room.

Emergency Evacuation of a School Building

Evacuation of a school building during a test may be required because of an emergency such as a fire alarm or bomb threat. In any situation in which the safety of the students is endangered, the principal has full authority to interrupt the test immediately. If it is possible, the students should be kept under supervision during the emergency. If work can be resumed following evacuation, then students may make up the remaining time so that they will have the allotted time on the test. Note that the written test is **not** timed. Allow the students the necessary time to complete the test. Following the test, a written report of the circumstances should be faxed to OSA. (See "Reporting Irregularities and/or Misadministrations" on page 39.)

Student Cheating

Do not permit students to obtain information from or give information to other students in any way during the test. If you suspect that such an attempt has occurred, warn the students that any further attempts will result in the termination of their tests. If necessary, move the students to another location. If these steps fail to end attempts to obtain or give information, notify the principal immediately and terminate the students' tests. At the conclusion of the test, all suspected cheating must be reported to the principal.

If, in the judgment of the principal, a student has attempted to give aid to or obtain aid from another person during the test, the principal must follow the school's disciplinary procedure for student cheating and invalidate the student's test. Score reports will not be produced for invalidated tests. When reporting student assessment data to the Department under such circumstances, the principal must report the student's test results as "administrative error." (See "Coding of Invalid Tests" on page 40.)

Illness

If a student becomes ill during a part of the test, the student should be excused until he or she is well enough to continue. For the Performance Test, the principal should estimate the time that the student had remaining to complete that part of the test. When the student is well enough to complete the test (and as long as the testing or makeup period has not ended), the student may be given the remaining time for that part. For the Written Test, the student should be given the time needed to complete the

test. When finishing the test, the student must be closely supervised so that he or she does not go back to previously finished questions on the test.

Students Absent on the Test Day

Plan to administer the test at a later date during the test administration or makeup period to all students who were absent when the test was initially given. Do not involve these students in any classroom discussions about the test prior to the time they take it.

Proctoring

Proctors must circulate periodically around the room during the administration of each session of the test to ensure that students are recording their responses to test questions in the proper manner and in the proper place. While circulating around the room, proctors should make sure that students are recording their responses to the multiple-choice questions on their answer sheets and their constructed responses in their test books. Students are not to record their multiple-choice responses in their test books. Proctors should also point out to students that they have left one or more answers blank or have darkened more than one circle for the same multiple-choice question. However, proctors may **not** comment to the student on the correctness or sufficiency of any answer.

No additional time is to be provided to students to transfer answers from test books to answer sheets at the end of the test, and no one, other than the student, may transfer answers marked in his or her test book to the multiple-choice answer sheet (the latter does not apply to students whose IEP or 504 Plan allows scribes to transfer answers from the test book to an answer sheet).

No one, *under any circumstances,* including the student, may alter the student's responses on the test once the student has handed in his or her test materials. Teachers and administrators who engage in inappropriate conduct with respect to administering and scoring State tests may be subject to disciplinary actions in accordance with Sections 3020 and 3020-a of Education Law or to action against their certification pursuant to Part 83 of the Regulations of the Commissioner of Education.

Determining the Need for Academic Intervention Services

Section 100.2(ee)(i) of the Regulations of the Commissioner of Education requires schools to provide academic intervention services to students who score below the State-designated performance level (performance level 3, final test score 65) on the Grade 4 Elementary-Level Science Test. All students who achieve a final score in performance levels 1 and 2 (see Appendix VIII) must receive academic intervention services. These services must commence in the semester immediately following the administration of the test. Charter schools are exempt from this provision. Providing academic intervention services is not mandated for nonpublic schools.

Academic intervention services are intended to assist students who are at risk of not achieving the State learning standards in English language arts, mathematics, social studies and/or science, or who are at risk of not gaining the knowledge and skills needed to meet or exceed designated performance levels on State assessments. Academic intervention services shall be made available to students with disabilities on the same basis as non-disabled students, provided that these services are in accordance with the student's IEP. The regulations also require that the parent or guardian of each such student shall be notified in writing, by the principal, of the academic intervention services to be provided to the student, the reason the student needs such services, and the consequences of not achieving expected performance levels. Such notification must be provided in the language best understood by the parent or guardian.

In the fall of 2010, the Board of Regents amended the regulations regarding academic intervention services (§100.2(ee)) to allow school districts to replace, in whole or in part, academic intervention services with Response to Intervention (RtI). A school district that chooses to do so must file an *LEA Response to Intervention Assurance Form* with the Department indicating the buildings, grades, and subject that RtI will be used in place of academic intervention services. School districts

must also agree to adhere to the requirements in §100.2(ii), which defines the RtI process. Information on this option can be found at http://www.p12.nysed.gov/docs/ais-rti.html.

Evaluating School Results on the Grade 4 Elementary-Level Science Test

The Rating Guides for the Written and Performance Tests provide summary charts that link each test question to the Elementary-Level Science Core Curriculum. The core curriculum is based on the *New York State Learning Standards for Mathematics, Science, and Technology (Elementary-Level*). The charts provide a reference to these documents for each question on the Written and Performance Tests.

Recording Test Scores and Storing Student Answer Papers

Schools must maintain complete and accurate records of students' test scores. A student's score and the date of administration must be entered on the student's permanent record.

All schools must keep their students' Performance Test booklets on file in the school for at least one year. Since the Performance Test booklets remain secure, they must be stored in a secure location. Schools must also keep their students' Written Test answer sheets on file for the same period of time.

Individual Student Reports

At the school's earliest opportunity after tests have been scored, schools are expected to provide results to each student's parent/guardian.

Review of Answer Papers by Students and Parents

Students and parents/guardians of students who have taken the Grade 4 Elementary-Level Science Test have the right to review student answer papers after the scores have been recorded as described in the preceding section. Answer papers should be reviewed in the presence of the principal, or the principal's designee, to ensure that no changes are made on the answer papers as they are being reviewed.

Online Submission of Teacher Evaluations of the Test to the Department

Suggestions and feedback from teachers provide an important contribution to the test development process. The Department provides an online evaluation form for State assessments where teachers may respond to several specific questions and may make suggestions. Go to http://www.p12.nysed.gov/assessment/teacher/evaluation.html to complete and submit your evaluation.

Return of Tests and Scoring Materials to the Department

Written Test: Since the Department will provide a new form of the Written Test each year, schools do **not** have to return Written Test materials to the Department. After the Department-designated test administration period has ended and the test has been scored, schools may use the Written Test as part of the instructional program. Schools may make photocopies of the Written Test if additional copies are needed for this purpose. All schools must keep student answer papers for the Written Test on file in the school for one year. Copies of this manual, the Rating Guide, and the Test Storage, Deputy and Proctor and Test Scoring Certificates for the Written Test should be kept on file at the school with the students' answer papers for reference. **No school should send answer sheets to the address listed on the following page for the return of certain Performance Test materials**.

Performance Test: Principals are required to ensure that the school returns Performance Test materials to the Department as indicated in the chart on the following page.

Return to the Department's Test Distribution Unit	Retain in the School Do NOT return to the Department
All *unused* Performance Test booklets, including regular, large-type, braille, and alternative language editions All used and unused Performance Test Rating Guides	Performance Test booklets used by students Test Administrator's Record Sheet Copies of this test administration manual Completed Test Storage Certificate Completed Deputy and Proctor Certificate Completed Test Scoring Certificate

The Performance Test materials must be returned at your school's expense after scoring has concluded but no later than June 15, 2017. For your convenience, a pre-addressed return label was enclosed with the shipment of test materials to return the Performance Test materials to:

Test Distribution Unit
New York State Education Department
Cultural Education Center, Room 167
Empire State Plaza
222 Madison Ave.
Albany, New York 12230

Note: New York City public schools should follow the procedures for the return of Performance Test materials provided to them by the New York City Department of Education.

Department Contacts

Different Department staff are responsible for various aspects of the test. Direct questions to one of the persons or offices listed on the following page.

Do not discuss test questions or other specific test content via e-mail. This is a violation of security, as stated on page 6. Questions about scoring should be addressed by telephone.

Test Administration:	Brian Suedkamp, Test Administration 518-474-5902 brian.suedkamp@nysed.gov
Rating/Scoring:	Cily Rueda, Test Development Unit 518-474-5900 cily.rueda@nysed.gov
Requests for Additional Test Materials:	Operations Group Fax a copy of shipping notice with a note itemizing which materials are needed to: 518-474-2021
Content/Curriculum:	Office of Curriculum and Instruction (C&I) 518-474-5922 emscurric@nysed.gov
Accommodations for Students with Disabilities:	Special Education Policy and Professional Development 518-473-2878 speced@nysed.gov
Reporting Results in SIRS:	Information and Reporting Services 518-474-7965 datasupport@nysed.gov
Academic Intervention Services:	Office of Innovative Programs, Student Support Services 518-486-6090

General Test Administration Procedures

Test Materials

The test materials provided by the Department for administering the Grade 4 Elementary-Level Science Test include:

For the Written Test:

- test booklets
- directions for administering and scoring the Written Test (pages 16–20 of this manual)

NOTE: Answer sheets are provided by your school's RIC/large-city scanning center (see page 2).

Schools will not receive printed scoring materials for the Written Test. The Scoring Key for the Written Test Part I and the Rating Guide for the Written Test Part II will be posted on the Department's web site at http://www.p12.nysed.gov/assessment/ at approximately 3:00 p.m. on June 7, 2017. Schools must print sufficient copies to supply one to each rater.

For the Performance Test (Form A):

- test booklets
- Station Diagrams (10 sets of each of these Station Diagrams and one Test Administrator's Record Sheet)
- directions for administering and rating the Performance Test (pages 22–37 of this manual)
- Test Administrator's Record Sheet (Appendix III of this manual)
- Rating Guide for the Performance Test (Form A)

The Written Test booklet and the test booklet and Station Diagrams for the Performance Test (Form A) are available in large-type and braille as well as in the following alternative language editions: Chinese (Traditional), Haitian Creole, and Spanish. The alternative language editions are direct translations of the English editions. The directions to students on the alternative language test materials are the same as those on the English editions. The Department does not provide separate directions for administering the alternative language editions of the tests. Teachers who speak the language should be able to administer the alternative language editions by using a copy of the test materials in the appropriate language and the directions provided in this manual. If a teacher who does not speak the alternative language administers the tests, the directions on the test materials should enable students to complete the tests by themselves.

The test materials to be provided by the school include pencils for both the Written and Performance Tests and the station materials for the Performance Test.

Test Administration Time

Written Test: The Written Test is not timed. Students should be given as much time as they need to complete it. As a general rule, most students will need 45–60 minutes of working time to complete the Written Test. Some students will need more time and provisions should be made to accommodate these students. In addition, the test administrator will need approximately 15 minutes to give directions to students.

Performance Test, Form A: The Performance Test will take approximately 75 minutes to administer, including time needed to provide instructions to the students and for students to move between stations. Field testing has determined that almost all students will complete the tasks at the three stations in this amount of time. Students are allowed 15 minutes at each station. All stations must be administered in one session.

Administering and Scoring the Written Test

Detailed Directions for Administering the Written Test

Make sure that sufficient quantities of all test materials are on hand. The following materials are needed:

for each student

- test booklet
- answer sheet
- No. 2 pencil

for the test administrator

- detailed directions for administering and scoring the Written Test (pages 16–20 of this manual)
- test booklet (for demonstration purposes)
- answer sheet (for demonstration purposes)
- extra answer sheets and No. 2 pencils

At the beginning of each test session, proctors must read the following statement to all students taking State tests:

> You cannot have any communications device, including a cell phone, with you during this test or during any breaks (such as a restroom visit). Such devices include, but are not limited to:
>
> - Cell phones
> - iPods and MP3 players
> - iPads, tablets, and other eReaders
> - Personal laptops, notebooks, or any other computing devices
> - Cameras, other photographic equipment, and personal scanning devices
> - Wearable devices/smart wearables, including smart watches and health wearables with a display
> - Headphones, headsets, or in-ear headphones such as earbuds, and
> - Any other device capable of recording audio, photographic, or video content, or capable of viewing or playing back such content, or sending receiving text, audio, or video messages
>
> If you brought any of these items to the building today, and have not already stored it in your locker or turned it over to me or a school official, you must give it to me now. You may not keep your cell phone or any of these items with you, or near you, including in your pockets, backpack, desk, etc. If you keep a cell phone or any of these items with you, your examination will be invalidated and you will get no score. Is there anyone who needs to give me any of these items now?
>
> [*Proctor: repeat list of devices.*]
>
> This is your last opportunity to do so before the test begins.

After the desks have been cleared of books and papers and when the students are ready to begin, say:

> Today you are going to take a test in science. I will now give each of you a test booklet face up on your desk. Do not open the booklet until I tell you to do so.

Distribute one test booklet, face up, to each student. Then say:

> I will now give out the answer sheets. Please do not write on the answer sheet until I tell you what to do.

After the answer sheets have been distributed, give directions for completing the heading of the answer sheet. Provide directions for marking any machine-readable name or number grids. These directions should be provided by the RIC.

If students do not understand how to mark the answer sheet, explain the appropriate directions until everyone knows what to do. Then say:

Look at the cover of your test booklet. Be sure it says “Grade 4 Elementary-Level Science Test, Written Test, June 5, 2017.” If you do not have the correct booklet, raise your hand.

Read the directions on the cover silently to yourself while I read them aloud.

Print your name and the name of your school on the lines above. (*Pause*.)

This test has two parts. Parts I and II are in this test booklet.

Part I contains 30 multiple-choice questions. Record your answers to these questions on the separate answer sheet. Use only a No. 2 pencil on your answer sheet.

Part II consists of 15 open-ended questions. Write your answers to Part II in this test booklet.

You will have as much time as you need to answer the questions.

Now turn to page 2. Read the directions on page 2 silently to yourself while I read them aloud.

DIRECTIONS

There are 30 questions on Part I of this test. Each question is followed by three or four choices labeled A–C or A–D. Read each question carefully. Decide which choice is the best answer. On the separate answer sheet, mark your answer in the row of circles for each question by filling in the circle that has the same letter as the answer you have chosen. Use a No. 2 pencil to mark the answer sheet.

Read Sample Question **S-1** below.

S-1 Frozen water is called

A fog

B ice

C steam

D vapor

The correct answer is **ice**, which is next to letter **B.** On your answer sheet, look at the box showing the row of answer circles for Sample Question **S-1**. See how the circle for letter **B** has been filled in.

Now read Sample Question **S-2**. Mark your answer on the answer sheet in the box showing the row of answer circles for Sample Question **S-2.**

Allow students time to mark the answer to Sample Question S-2 on their answer sheets. If necessary, demonstrate on the chalkboard the correct way of marking answers on the answer sheet. Then say:

> **S-2** Which animal has wings?
>
> A bird
>
> B frog
>
> C mouse
>
> D rabbit
>
> The correct answer is **bird**, which is next to letter **A.** On your answer sheet, you should have filled in circle **A**.
>
> Answer all 30 questions on Part I of this test. Fill in only one circle for each question. Be sure to erase completely any answer you want to change. You may not know the answers to some questions, but do the best you can on each one.
>
> When you finish Part I, go on to Part II. Answer all of the questions in Part II in the space for each question.

If students do not appear to understand the sample questions or the marking of the answer sheet, the appropriate directions may be explained until everyone knows what to do. After all questions have been answered, say:

> Check your booklet to be sure that it is complete and that no pages are stuck together.
>
> When I tell you to, turn to question 1 and begin work. When you are finished, close your test booklet and place it on top of your answer sheet.
>
> Now turn the page and begin work.

Walk around the room and make sure that all students understand the directions and are marking their answer sheets properly. Explain again the test-taking procedures to any student who appears to be having difficulty.

No one, under any circumstances, may interpret or explain test questions to students, nor may anyone review or comment on any of a student's answers while a test is in progress. In response to inquiries by students concerning the meaning or interpretation of test questions, students should be advised to use their own best judgment.

Students should remain quietly at their desks when they finish the test. The teacher may collect the test materials either as students complete the test or when most of the students have finished.

If the test is administered in a large-group setting, school administrators may prefer to allow students to hand in their test materials as they finish and then leave the room. If so, take care that students leave the room as quietly as possible so as not to disturb the students who are still working on the test.

No one, *under any circumstances,* including the student, may alter the student's responses on the test once the student has handed in his or her test materials. Teachers and administrators who engage in inappropriate conduct with respect to administering and scoring State tests may be subject to disciplinary actions in accordance with Sections 3020 and 3020-a of Education Law or to action against their certification pursuant to Part 83 of the Regulations of the Commissioner of Education.

Scoring the Written Test, Parts I and II

NOTE: Teachers are **not** permitted to score their own student's answer papers.

The Scoring Key for the Written Test Part I and the Rating Guide for the Written Test Part II will be posted on the Department's web site at http://www.p12.nysed.gov/assessment/ at approximately 3:00 p.m. on June 7, 2017.

The student's raw score is determined as follows:

Part I—All schools administering the Grade 4 Elementary-Level Science Test are required to make arrangements to obtain answer sheets and associated scanning services from a RIC or large-city scanning center. These centers will scan and score the answer sheets according to the following criteria:

1. One credit will be awarded for each correct answer.
2. Credit will not be allowed if two or more answers have been marked for the same question.
3. The raw score for Part I will be determined by counting the number of correct responses.

Part II—assign credits as indicated in the Rating Guide for the Written Test. A list of criteria for rating the open-ended questions on Part II is provided in that guide.

***Machine Scoring*.** Schools should be sure to check with their scoring center concerning the procedure to be followed in preparing the answer sheets for machine scoring.

The separate answer sheet containing the multiple-choice answer grids also provides grids for recording a student's Part II and Performance Test scores. When filled in, these grids enable scoring centers to produce student records that include final student scores. Record the Performance Test scores in these grids **after** the Written Test is administered but before the answer sheets are machine scored. If schools have two separate answer sheets for the Written and Performance Tests, both must be sent to the RIC or large-city scanning center.

Determining the Student's Final Test Score. Students who are in attendance and who respond to at least one item on both the Written Test and the Performance Test will receive a valid score and a valid performance level. A chart for converting the student's Written Test raw score and Performance Test raw score to a final score will be provided on the Department's web site at http://www.p12.nysed.gov/assessment/. Once a final score has been determined for each student, a performance level can be assigned. The Performance Levels Chart is provided in Appendix VIII of this manual.

Note: The final score corresponding to the raw scores in the conversion chart will change with each year's edition of the test. For this reason, it is crucial that, for each test year, only the conversion chart provided for that edition be used to determine the student's final score.

Rating the Written Test, Part II

Approximately one-third of the Written Test will consist of open-ended questions. A group of teachers should rate the Part II open-ended questions on the Grade 4 Elementary-Level Science Test. There must be at least two raters. No rater assigned to score a student's test responses may be that student's teacher. School administrators decide who may rate Grade 4 Elementary-Level Science Test(s) after review of the teachers' certification and present and past teaching assignments. It is estimated that two teachers working as a team should be able to rate all of the open-ended responses for 30 students in approximately one hour.

The Rating Guide for the Written Test, Part II gives detailed directions for rating the open-ended section of the Written Test and specific criteria for rating each question. In rating the students' test booklets, each rater should follow the procedures detailed in the rating guide. The rating should be completed no later than June 15, the date when answer sheets must be submitted to the scanning centers. Copies of the Written Test Rating Guides should be kept on file at the school for reference for at least one year.

Organizing the Rating Process

The following is a suggested procedure for managing the mechanics of the rating process.

1. Designate one person as the coordinator of the rating process. The coordinator may be appointed at either the building or the district level. He or she will be responsible for training and supervising raters and may also rate some of the questions in the student test booklets.
2. Set aside one room as a central rating room for collecting, sorting, circulating, and storing test booklets and for preparing and maintaining records.
3. Provide adequate time for rating during the school day.
4. Make sure that each rater receives approximately the same number of student booklets, taking care to ensure that no teacher is assigned to rate the test booklets of his or her own students.
5. At least two teachers must participate in rating the open-ended questions in Part II. Each should be responsible for rating a selected number of the open-ended questions in each test booklet. No one teacher is to score more than half of all the open-ended questions in a student's test booklet.
6. Prior to the rating of students' responses to the open-ended questions in Part II, allow time to provide training for all raters (even if they have received prior training). If possible, select at random 10–15 student test booklets and duplicate them for use as a "warm-up" exercise with the raters for discussion of the questions, the criteria, and the rating of each item. During the training exercise, after three or four complete student test booklets have been rated, ask the raters to indicate, by a show of hands, how many credits they gave each response. If there is some disagreement about the number of credits to be awarded a response, ask raters who gave different credits to a response to explain their rating by citing specific criteria from the rating guide.

Administering and Rating the Performance Test

Preparation

Well in Advance of the Test Date:

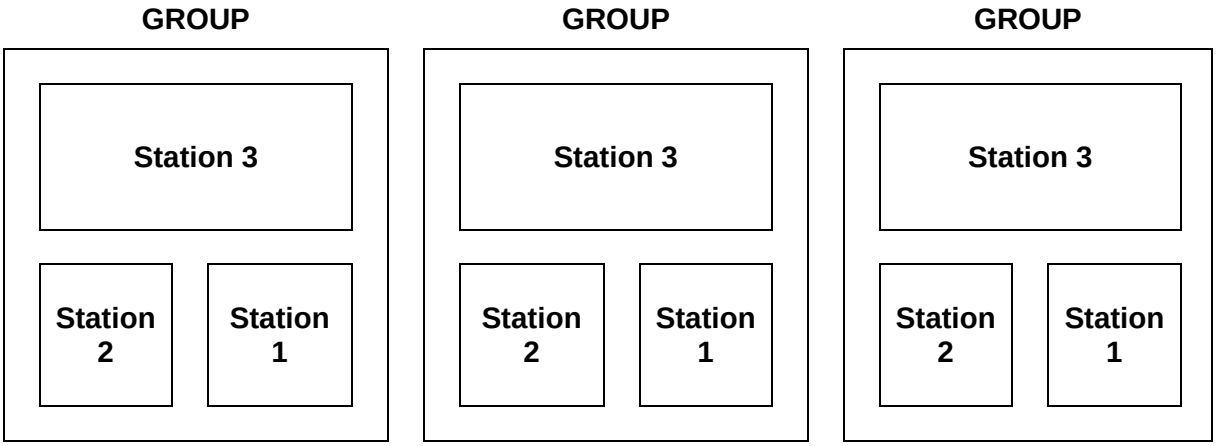
1. Notify teachers and other staff of this test, the role that each will have, and that test security measures must be maintained.
2. Assemble and prepare all equipment according to the directions (pages 25–31) in this manual. The materials listed specify what is needed for a single station. Several commercial and public suppliers have constructed kits that provide the specific equipment for each station. Appendix VII provides a list of these suppliers. Although kits ordered from suppliers should generally be the same, some kits may not be ready for immediate use, and additional time may be needed for preparation. The school will need to provide some miscellaneous materials such as marking pens, tape, or labels.
3. Check the materials well in advance of the test date. Contact the supplier for a replacement if a piece of equipment or material is missing or arrives broken.
4. Check to be sure that the equipment and materials are adequate for the number of students to be tested. Appendix I provides a complete list of materials needed for each station. A supplier's kit of materials usually provides for a maximum of 30 students. Each group of stations will accommodate three students, and students will move to each station within the group. If 30 students are to participate in the Performance Test, you will need equipment for 10 complete setups of each station. Each student will need one test booklet and a sharpened pencil. Check that enough booklets will be available for the number of students to be tested. Test administrators should have a supply of extra sharpened pencils on hand.
5. Select and reserve a testing room. Appendix II provides a comparison of possible Performance Test sites. Once all the equipment has been prepared, it should take three to four work-hours to set up the room, 75 minutes to administer the test (for a class of 30 students), and one hour to disassemble the setup. For larger schools and schools where the test will be given early in the school day, station setup can be done the day before and secured overnight. Do **not** leave test booklets out overnight.
6. **Plan the layout of the room and prepare a diagram of the layout of the stations. This is an essential step in the process of Performance Testing.** The testing room must have flat top student work spaces (student tables, lab tables, library tables, or cafeteria tables) in sufficient numbers for the number of students to be tested. An individual student desk may be too small to accommodate all of the equipment for a station plus provide room for the student to write. It may be possible to place two smaller individual desks together to make a larger work area for one station. Determine how many tables will be needed and how they will be arranged in groups of three stations each (see page 24). The room will need to be large enough to accommodate 8–10 groups (24–30 students) comfortably. Students will need to move (either sideways or front-to-back) among stations within their group with as little confusion as possible.
7. One station, the "Ball and Ramp," needs more space than is available comfortably on a single student desktop for the ball and ramp place mat. If you use single desks, the "Ball and Ramp" station will require two student desks abutted side-by-side. (See diagram on page 31.) Figure out how many desks (tables) will be needed and how they will be arranged in groups so that students will be able to rotate easily from one station to the next with a minimum amount of confusion. Give special attention to the placement of the "Ball and Ramp" station, especially if two student desks are abutted. Make a diagram of your testing room setup for reference.

8. Check that all print materials from the Department are ready. These include the student Performance Test booklets, directions for setting up the stations, detailed directions for administering the test, Station Diagrams for Stations 1, 2, and 3, and a Test Administrator's Record Sheet.
9. Check that at least two adult test administrators (two professionals, or one professional and one paraprofessional) have been trained and are completely familiar with the test protocols and the equipment. These adults will administer the test, direct student movement, and resolve any problems with the equipment. In addition, teachers or aides may be present to provide testing accommodations to students with disabilities pursuant to their IEPs. To minimize possible distractions during the testing, other adults should **not** be invited to attend.

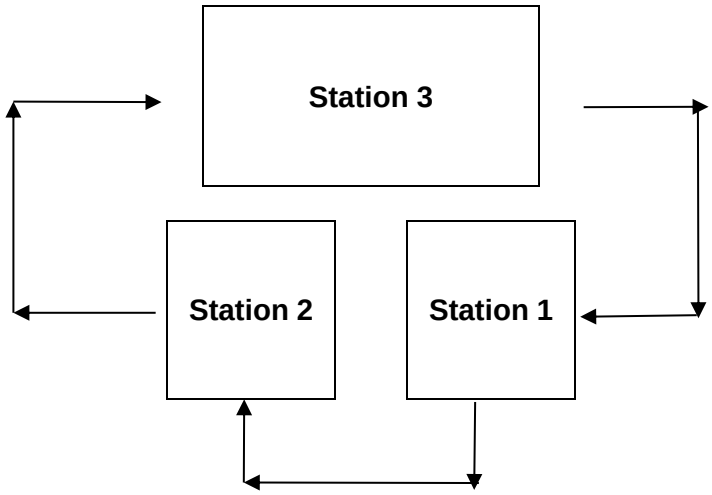
One Day Prior to the Test or Early Morning on the Test Date:

1. Arrange the tables into groups of three stations each. Set up each station according to the directions provided in the section of this manual entitled "Preparing Each Station," on pages 25–31. The materials listed specify what is needed at each station for each group that is being tested. Arrange the equipment exactly as it is shown on the Station Diagram.
2. Place the Station Diagram at the bottom left corner of each station.
3. **Safety:** The Performance Test is to be administered under the supervision of trained test administrators. Staff should exercise the same safety precautions that apply when students engage in performance tasks in a science classroom. Students should be monitored closely for safe use of equipment and materials at all times.
4. **Suggestion:** Have a mop or sponge handy for spills at Station 1.
5. **Complete the Test Administrator's Record Sheet. This information is *very important*. It will be used to determine the range of correct answers by the teachers rating the students' tests. A copy is provided in Appendix III of this manual.**

Diagram of Typical Classroom Setup



Student Rotation within Groups



Preparing Each Station

A list of the materials needed for one station is provided below, along with specific directions for preparing the materials and setting up the station. Refer to the diagram of the setup for your testing room to determine how many individual station setups you will need. For example, if you plan to have 10 groups (30 students), you will need 10 setups for each station.

Station 1 — Measuring Objects and Liquids

Materials needed for *one* station:

- 1 equal-arm balance
- 1 set of gram masses (mixture of two 20-g, three 10-g, four 5-g, and ten 1-g for a total of 100 g)
- 3 clear plastic jars, approximately 125-mL capacity
- 2 screw tops to fit jars
- 1 large plastic cup, approximately 300-mL capacity containing about 150 mL of water
- 1 measuring container (beaker), 100-mL capacity with clearly marked gradations
- 1 rough-cut rock (about 1 inch cube) that will fit easily into the beaker and sink completely in the water without causing the water to overflow
- 1 resealable plastic bag, large enough to hold the set of gram masses
- 1 ruler with units for metric (30 cm) and for standard (12 inches) measurement, neither with indented zero points
- 2–3 paper towels
- Station Diagram for Station 1 (see next page)

Teacher materials:

- 1 black, permanent, fine-line marker
- supply of water for 10 Station 1 setups
- medicine cup or other tool to measure 25 mL of water as accurately as possible

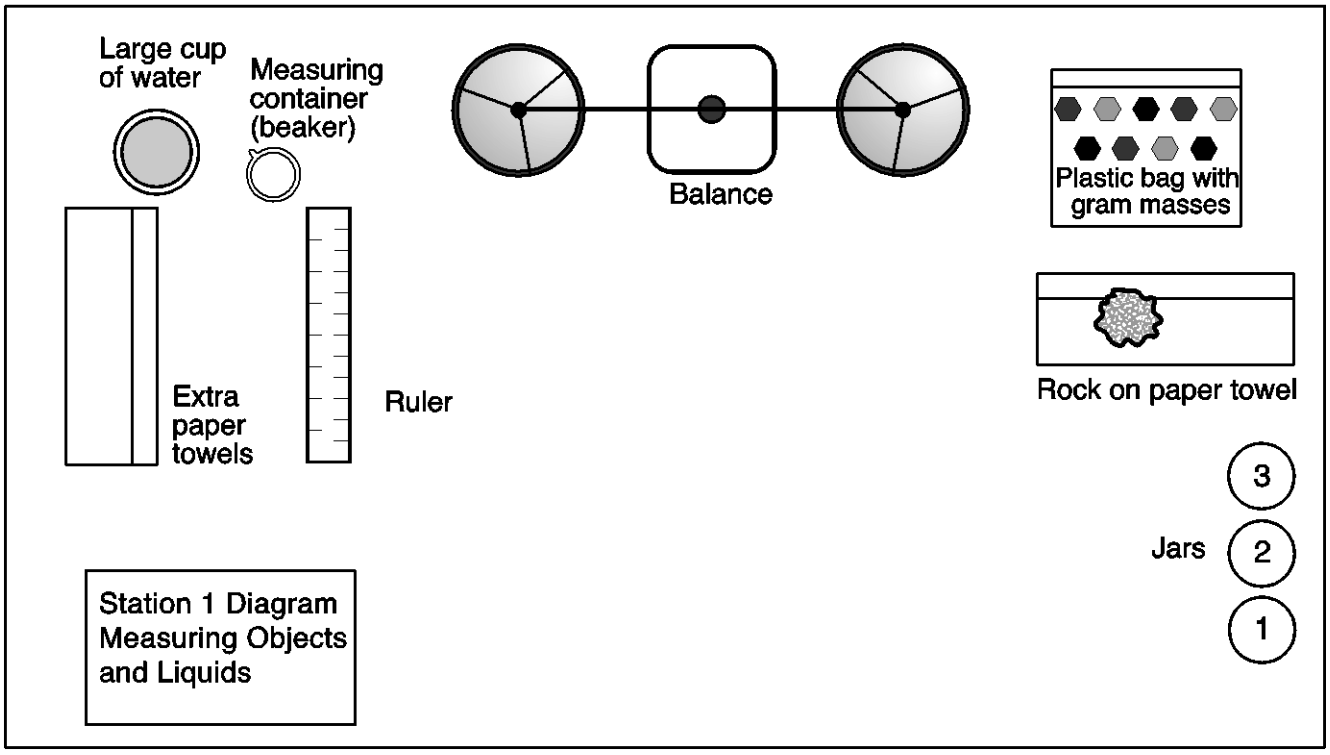
Preparation:

1. Check that all Jar 1s are approximately the same width, height, and mass so that the acceptable range for scoring question 1 will be correct for all of them.
2. On Jar 1, draw a thin line all the way around the outside surface with a permanent black marker so the inside volume to the line is 65 mL. On opposite sides of the jar, affix a label or print “1.” (This jar will *not* have a screw top.)
3. Check that the volume of water to the line on all Jar 1s is approximately the same, so that the acceptable range established for scoring question 2 will apply to all of them. **The volume to the line should be 65 mL**.
4. Use the medicine cup to measure exactly 25 mL of water. Pour this water into Jar 2 and secure it with a screw top. On opposite sides of the jar, affix a label or print “2” and “DO NOT OPEN.” When measuring the water, be as precise as possible, so that the acceptable ranges established for scoring question 4 will apply to all Jar 2s. Do not use the student beaker for this measurement. Make sure that each Jar 2 contains exactly 25 mL of water.
5. Secure Jar 3 with a screw top. On opposite sides of the jar, affix a label or print “3” and “DO NOT OPEN.”
6. On the plastic bag, affix a label or print “GRAM MASSES” with black permanent marker on one side. Place the set of gram masses inside the bag.

7. Set up the equal-arm balance as shown in the Station Diagram for Station 1 below.
8. On the plastic cup, affix a label or print “WATER” on opposite sides. Add approximately 150 mL of water to the plastic cup.
9. Complete the table for Station 1 on the Test Administrator’s Record Sheet for Station 1 (see Appendix III).
10. Tape the Station Diagram for Station 1 at the bottom left corner of the station.
11. Place all of the materials at the station as shown in the Station Diagram for Station 1.
12. On the ruler for Station 1, be sure that both scales, metric and standard units, are not taped over but are available for student use.

    Note: For Station 3, the ruler will *not* have standard units visible. Therefore, once prepared for use, these two sets of rulers cannot be used interchangeably.

Station Diagram
Station 1 — Measuring Objects and Liquids



Station 2 — Electrical and Magnetic Testing

Materials needed for *one* station:

- electrical tester:
  – 1.5-volt “D” cell battery
  – 1.5-volt bulb and bulb holder
  – battery holder (plastic or metal recommended)
  – 3 insulated wires with clips
- bar magnet (approximately 1.5 cm x 7 cm)
- resealable plastic bag containing eight objects and labeled “Test Objects”
  – penny
    (**Note:** Penny must be new and shiny. Oxidized pennies will not conduct electricity.)
  – rubber band (at least 1/4 inch wide)
  – paper clip (all metal)
  – plastic spoon (small)
  – nickel (United States five cents)
  – wooden stick (like Popsicle stick or tongue depressor)
  – aluminum foil (heavy duty, about 5-cm square)
  – colored ceramic disk (magnetic)
    (**Note:** Ceramic materials are nonmetallic, even if they are magnetic.)
- Station Diagram for Station 2 (see next page)

Teacher materials:

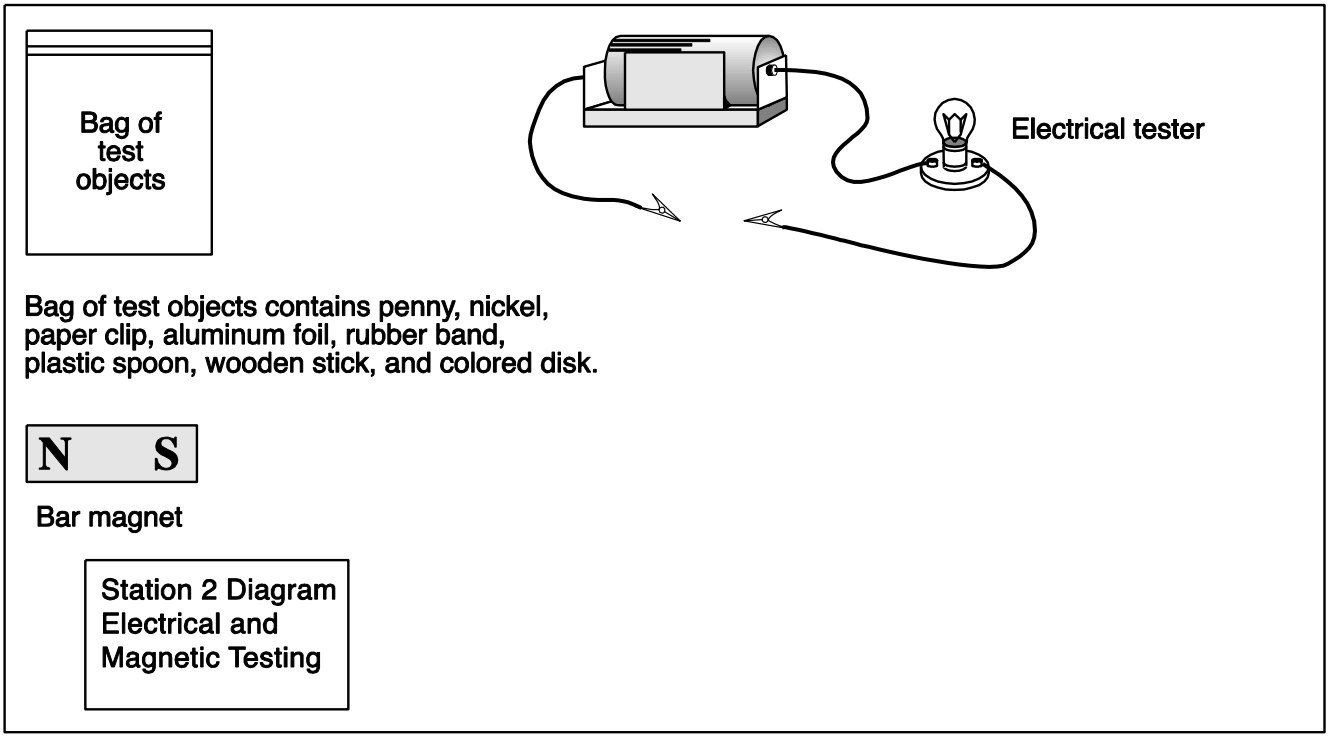
- 1 black, permanent, fine-line marker
- extra batteries and bulbs for the electrical testers

Preparation:

1. Make the electrical tester using the equipment listed above for the “electrical tester.” Check to be sure that it will work.
2. Affix a label or print “Test Objects” on the resealable plastic bag with a permanent black marker.
3. Place the eight objects in the bag labeled “Test Objects.”
4. Tape the Station Diagram for Station 2 at the bottom left corner of the station.
5. Place all the materials at the station as shown in the Station Diagram for Station 2.

Safety: Be sure the students do not leave the electrical tester hooked up when it is not in use. When storing the tester, make sure that the batteries are separated from the conductors, so that they cannot come in contact and cause a short circuit. Carefully monitor the use of equipment by the students. Students should not put any of the objects in their mouths.

Station Diagram
Station 2 — Electrical and Magnetic Testing



Station 3 — Ball and Ramp

Materials needed for *one* station:

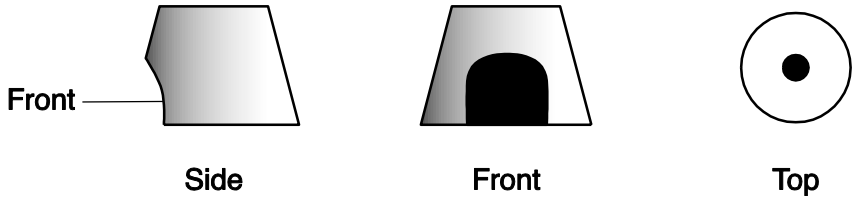
- Wood block (preferably a cube) to serve as the ramp support (total height: 5–6 cm)
- 1 ruler, 30-cm plastic without an indented zero mark and with a grooved center that can accommodate a golf ball
- 1 transparent, round, plastic deli container about 12-cm diameter, 1 pint in volume, and approximately 15 grams in mass
- 1 golf ball in a resealable, clear plastic bag labeled “Golf Ball”
- 1 Ping-Pong ball in a resealable, clear plastic bag labeled “Ping-Pong Ball” (Do *not* put the Ping-Pong ball at the station.)
- 1 Ball and Ramp Place Mat (see Appendix IV for template if needed)
- Station Diagram for Station 3 (see page 31)

Teacher materials:

- 1 black, permanent, fine-line marker
- 1 pair of scissors or craft knife
- 1 roll double-sided carpet tape or duct tape
- 1 set of self-adhesive colored dots for top of the containers (one dot for each container)
- 1 roll of masking tape

Preparation:

1. Cut a hole (about 6 cm x 6 cm) on one side of the plastic cup to allow enough room for either ball to roll inside. (See the diagrams below.)
2. Place a colored dot sticker on the top center of the cup. You may also make the dot with a colored permanent marker:



3. The grooved plastic ruler serves as the ramp for rolling the balls. On the ruler, allow only the metric units to show. Cover the standard units (inches) with black permanent marker, masking tape, or electrical tape. Be sure the tape does not get into the groove of the ruler, as it may interfere with the roll of the balls. If necessary, place tape on the backside of the ruler to ensure that the metric units are legible.
4. Reproduce enough Place Mats for the number of stations you will need. They must be 8½" x 11", preferably laminated. Appendix IV provides a master copy that can be reproduced and laminated. (Most suppliers will include these in their kits.)
5. Obtain enough blocks of wood to act as the ramp support for each of the ten stations.

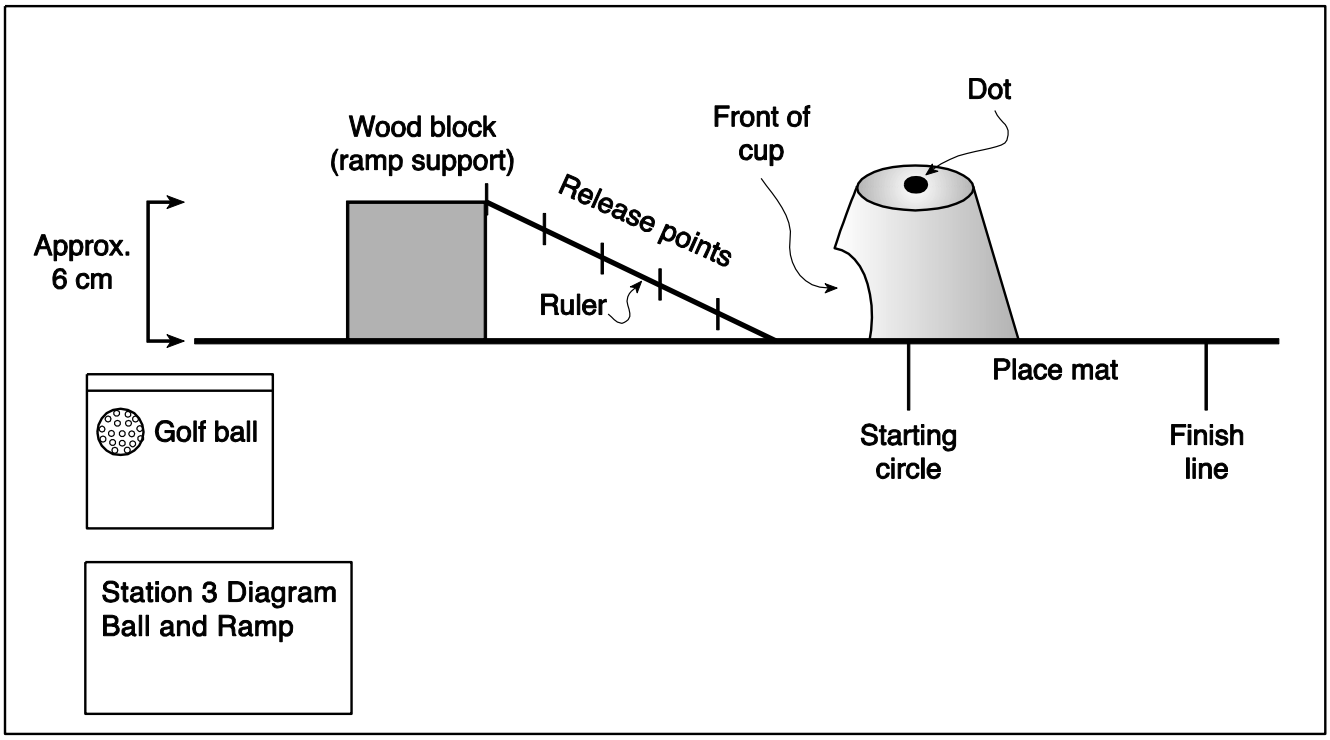
Station Setup Sequence:

1. The student materials for this station can be set up:
    - on a large table
    - on two single student desks pushed together so that the ramp crosses over the gap between the two desks

DO NOT TAPE DOWN ANY EQUIPMENT UNTIL
EVERYTHING HAS BEEN PUT IN PLACE AND TESTED.

2. Place the ramp support to the back and far left of the desk/table so that the ruler will slope down from left to right. Place the ramp back far enough on the desktop so that the student has plenty of room to write in the test booklet. The ruler's numbers must be closest to the student's side of the desk (even if the numbers are upside down). If the numbers are not closest to the student's side, reverse the ramp position to the right of the desk.
3. Place the ruler's 29-cm mark at the edge of the ramp support and the ruler's zero mark on the table. Slip the place mat under the ruler so that it is aligned with the "End of Ruler Placement" mark (about 1 cm inside the edge of the mat).
4. When the golf ball is released from the top of the ramp, it must be able to push the cup significantly farther than the Finish Line on the place mat. Try one setup first to be sure that the cup is not too heavy.
5. Place the cup on the place mat's Starting Circle (1 cm away from the end of the ruler, with the cup's opening toward the ruler). Try rolling the golf ball from the 20-cm and the 15-cm marks. The ball must push the dot on the cup past the Finish Line each time. Try again from the 5-cm mark. The dot must **not** reach the Finish Line. From the 10-cm mark, the golf ball may either push the dot on the cup either too far or not far enough, but the dot must **not** stop on the Finish Line from the 10-cm release point. From any of the release points, 20, 15, 10, or 5-cm, the dot should not stop on the Finish Line. If any of these causes the dot to stop on the Finish Line, slightly adjust the slope of the ramp so that it would be necessary to have a release point someplace between the 15-cm and 10-cm point or between 10-cm and 5-cm point to have the dot stop on the Finish Line. Do not make the ramp too steep as it will become more difficult to keep the ball in the groove of the ruler, or the ball will bounce at the bottom of the ramp, producing inconsistent results. (As a laminated place mat is used more over time the laminate becomes smoother and has less friction which may cause the distances the cup will travel to change slightly.)
6. Once you have determined the correct height of the ramp, tape down the ramp support with double-sided carpet tape or duct tape. Tape the ruler to the place mat. Roll duct tape back on itself so that there are two sticky sides. Place duct tape or masking tape **under** each end of the ruler to fasten it securely to the block and the place mat. Place masking tape across the ruler above the 29-cm mark and tape it down to the supports. Tape down the place mat.
7. Tape the Station Diagram for Station 3 to the bottom left corner of the station.
8. Place all materials at the station as shown in the Station Diagram for Station 3.

Station Diagram
Station 3 — Ball and Ramp



Detailed Directions for Administering the Performance Test

NOTE: Make sure that the Test Administrator's Record Sheet (Appendix III) was completed when the stations were set up. This information is *very important*. It will be used to determine the range of correct answers by the teachers rating the test.

Make sure that sufficient quantities of all test materials are on hand. The following materials are needed:

For each student:

- test booklet (Form A)
- pencil

The appropriate test booklet should be placed at each station.

For the test administrator:

- detailed directions for administering the Performance Test (pages 32–36 of this manual)
- Test Administrator's Record Sheet (Appendix III)

Several groups with three different stations are set up in the testing room. Each of the three stations contains different tasks. The stations are numbered from 1 to 3. Each student will rotate through all three of these stations. Students will have 15 minutes to complete the tasks at each station. Check each station before the students are admitted to the testing room to determine that each station has the required materials and that they are properly arranged (see diagram on page 24).

Place a blank test booklet and a sharpened pencil at each station *before* each new class enters the room. Recheck each station *before* each new class enters the testing room to assure that *all* materials are available and are in order.

Before the test session begins, write a sample heading on the chalkboard. The information should include the student name, school name, city, teacher's name, and today's date.

You must use an accurate timing device, such as a stopwatch or a clock with a sweep-second hand, to accurately provide time splits of 10, 13, and 15 minutes. Note the start time and intervals on a piece of paper, the chalkboard, or in this administration manual. The table below provides a sample of the information that will be needed for *each session.* A blank table is provided on page 35.

	ACTUAL TIME		
Time	**First Station**	**Second Station**	**Third Station**
Start	9:00	9:25	9:50
+10 minutes	9:10	9:35	10:00
+13 minutes	9:13	9:38	10:03
+15 minutes	9:15	9:40	10:05

Students should have an opportunity to visit the restrooms and wash their hands just before the testing period.

Students should be assigned to the stations as they enter the room, filling the seats in an orderly fashion so that all stations in a group are full. Have the first three students take seats at the group of stations farthest from the door, the next three students at the next group, etc.

Instruct students ***not*** to open the test booklet or touch the equipment until they are told to do so.

At the beginning of each test session, proctors must read the following statement to all students taking State tests:

You cannot have any communications device, including a cell phone, with you during this test or during any breaks (such as a restroom visit). Such devices include, but are not limited to:

- Cell phones
- iPods and MP3 players
- iPads, tablets, and other eReaders
- Personal laptops, notebooks, or any other computing devices
- Cameras, other photographic equipment, and personal scanning devices
- Wearable devices/smart wearables, including smart watches and health wearables with a display
- Headphones, headsets, or in-ear headphones such as earbuds, and
- Any other device capable of recording audio, photographic, or video content, or capable of viewing or playing back such content, or sending receiving text, audio, or video messages

If you brought any of these items to the building today, and have not already stored it in your locker or turned it over to me or a school official, you must give it to me now. You may not keep your cell phone or any of these items with you, or near you, including in your pockets, backpack, desk, etc. If you keep a cell phone or any of these items with you, your examination will be invalidated and you will get no score. Is there anyone who needs to give me any of these items now?

[*Proctor: repeat list of devices.*]

This is your last opportunity to do so before the test begins.

When students are at their first station and ready to work, read the following information to them. This direction-reading stage is ***not*** to be counted as part of the 15 minutes for completing the first station. Say:

> Good morning [afternoon]. Today, you will be taking a science skills test. I think you will enjoy it because you will get to use science equipment to help you answer the questions on the test. Please listen carefully, follow directions closely, and do your best work.
>
> You should have a test booklet and a pencil at your station. If you don't, raise your hand. *(Pause.)*
>
> Now, on your test booklet, print your first and last name. *(Pause.)* Print the name of your school, your city, your teacher's name, and today's date. I have put that information on the chalkboard. (*Pause for students to finish.)*
>
> Keep this test booklet with you throughout the test. It will be collected at the end of the test. Read the directions on the cover silently to yourself while I read them aloud.
>
> Your booklet contains three science performance tasks. At each station you will have 15 minutes to finish your work. Continue working at each station until you see the word **STOP!** at the bottom of the page or until the time is up. Please wait quietly and patiently if you finish before the time is up. **Please leave the station the way you found it.**
>
> Do ***not*** help other students or ask others to help you. There must be no talking between students during this test.
>
> Read the directions for each station carefully. All of your answers must be written in this test booklet. You will be given directions on how and when to move to the other stations. Please listen carefully to all of the directions.
>
> Do ***not*** go on to the next page until you are told to do so.

Do not try to explain at this time how the students will be moving from station to station. Leave that information until after the completion of the first task.

The directions that follow will be repeated three times during the testing session.

START HERE when reading directions for the second and third stations.

Say:

> At the bottom left edge of your table, there is a Station Diagram with the name and station number where you will be working. Open your test booklet and find that station number.

Look around to be sure that everyone has found his or her place. Say:

> Now, read the directions for that station number in the box at the top of the page in your test booklet. *(Pause for 15 seconds.)* Then check that all of the materials are at your station. Use the Station Diagram to make sure that your equipment is set up correctly. Be sure that you have all the equipment. *(Pause for about 1 minute.)* If anyone is missing equipment, raise your hand. (*Pause.)* At Station 2, check to be sure that the electrical tester works. If the electrical tester does not work, raise your hand. *(Pause.)*

Once all of the students complete their equipment check, say:

> You may begin work.

Begin timing the 15 minutes now. **Complete the table below for each session.** You will need to make additional copies if you are testing students in more than one session.

	ACTUAL TIME		
Time	**First Station**	**Second Station**	**Third Station**
Start			
+10 minutes			
+13 minutes			
+15 minutes			

Most student questions should be answered with “Read it again,” “Sound out the word,” or “Do your best.” If students are not sure about the names of specific objects or equipment, you may refer them to the Station Diagram. All materials are labeled and clearly identified on these diagrams.

Do ***not*** give students assistance on how to conduct the procedure. You should ***not*** acknowledge that the student is engaged in a correct or an incorrect process. No one, under any circumstances, may interpret or explain test questions to students, nor may anyone review or comment on the answer paper of a student while this test is in progress. Exceptions to this would be safety concerns (short circuiting the electrical tester, a student putting an object in his or her mouth, etc.), lost or broken equipment, or specific provisions in a student’s IEP for allowable testing accommodations.

Station 3 — Ball and Ramp: While at this station, the students will raise their hands to get a Ping-Pong ball from the test administrator.

After 10 minutes, say:

> You have 5 minutes left. Continue working until you see the word **STOP!**

After 13 minutes, say:

> You have 2 minutes left. Continue working until you see the word **STOP!**

After 15 minutes, say:

> Stop work. Please put everything back the way it is shown on the Station Diagram.
>
> At Station 1, pour the water from the beaker back into the large cup and place the rock on the paper towel.
>
> At Station 2, make sure all the objects are placed back in the bag and the bar magnet is left outside of the bag.
>
> At Station 3, raise your hand to return the Ping-Pong ball.

Collect all the Ping-Pong balls from the students at Station 3. Before the students rotate within groups, make sure that the equipment at all stations is placed correctly so that it corresponds with the station diagrams.

Then say:

> You are now going to move to the next station. I will show you how it is done. ***Be sure to take your test booklet and pencil with you.***

Because stations have been arranged in groups, student movement can be kept to a minimum. It is recommended that the test administrator take one group and demonstrate for the whole class how students will move to the next station. Then let each group rotate one at a time and provide help when necessary. When all the students have moved, repeat the directions beginning on page 36 until the testing session is complete.

When the students have completed ALL THREE STATIONS, say:

> The science skills test is over. Thank you for being so attentive and cooperative during the test. Please wait quietly until you are dismissed.

Be sure to collect a test booklet and pencil from each student before the students leave the testing room. Return all unused test booklets and materials to the secure locations designated by your school administrator until such time as they are returned to the Department according to the instructions on pages 12 and 13 of this manual.

Rating the Performance Test

NOTE: Teachers are **not** permitted to score their own students' answer papers.

The entire Performance Test will require rating by elementary-level teachers. It is estimated that a team of three teachers should be able to rate the responses to all three stations for about 30 students in one hour. This scoring can be most quickly accomplished if one teacher rates all students' responses to Station 1 while another rates all students' responses to Station 2 and a third rates all students' responses to Station 3.

A team of at least two teachers should rate the Grade 4 Elementary-Level Science Performance Test. School administrators determine who may rate the Grade 4 Elementary-Level Science Performance Test upon review of teachers' certification and current and past teaching assignments.

The Rating Guide for the Performance Test, Form A, gives detailed directions for rating the Performance Test and specific criteria for rating each item. It is printed on yellow paper and was included in the shipment of test materials from the Department. In rating the students' test booklets, each rater should follow the procedures in the rating guide. The rating should be completed as soon as possible after the administration of the Performance Test and prior to June 15, the date when answer sheets must be submitted to the scanning center.

Organizing the Rating Process

The following is a suggested procedure for managing the mechanics of the rating process.

1. Designate one person as the coordinator of the rating process. The coordinator may be appointed at either the building or the district level. He or she will be responsible for training and supervising raters and may rate some of the students' responses.
2. Set aside one room as a central rating room for collecting, sorting, circulating, and storing test booklets and for preparing and maintaining records.
3. Provide adequate time for rating during the school day.
4. Make sure each rater receives approximately the same number of student booklets, taking care to ensure that no teacher is assigned to rate the test booklets of his or her own students.
5. Provide a copy of the completed Test Administrator's Record Sheet (Appendix III) to each rater.
6. At least two teachers and preferably three should participate in rating the questions on the Performance Test. Each should be responsible for rating all of the questions for one station. No one teacher is to score all the open-ended questions in a student's test booklet.
7. Prior to the rating of the students' answers to the Performance Test, allow time to provide training for all raters (even if they have received prior training). If possible, select at random 10–15 student test booklets and duplicate them for use as a "warm-up" exercise with the raters for discussion of the questions, the criteria, and the rating of each item. During the training exercise, after three or four complete student test booklets have been rated, ask the raters to indicate, by a show of hands, how many credits they gave each answer. If there is some disagreement about the number of credits to be awarded for an answer, ask raters who gave different credits to an answer to explain their rating by citing specific criteria from the rating guide.
8. Raters should have a set of stations available to check the accuracy of questionable student answers by actually performing the task for which the answer was given.

Note: It is recommended that schools do **not** record the students' Performance Test scores on their scannable answer sheets until after the students have taken the Written Test and completed their portion of the answer sheet. This way, students will not be distracted by seeing their Performance Test scores on the answer sheets. This will also prevent students from altering those scores.

Finality of Teacher Scoring Committee's Scores

When the teacher scoring committee completes the scoring process, test scores must be considered final and must be entered onto students' permanent records. In addition, each rater must sign the *Test Scoring Certificate,* attesting that he or she fully and faithfully observed the regulations for scoring the tests. The principal must also sign this certificate to attest that the rules and regulations for scoring were fully and faithfully observed.

Principals and other administrative staff in a school or district do not have the authority to set aside the scores arrived at by the teacher scoring committee and rescore student test papers or to change any scores assigned through the procedures described in this manual and in the scoring materials provided by the Department. Any principal or administrator found to have done so, except in the circumstances described below, will be in violation of Department policy regarding the scoring of this test. Teachers and administrators who violate Department policy with respect to scoring State tests may be subject to disciplinary action in accordance with Sections 3020 and 3020-a of Education Law or to action against their certification pursuant to Part 83 of the Regulations of the Commissioner of Education.

On rare occasions, an administrator may learn that an error had occurred in the calculation of a final score for a student or in recording the student's score in the permanent records. For example, the final test score may have been based on an incorrect summing of the student's raw scores for parts of the test or from a misreading of the conversion chart. When such errors involve the final scores on any State test of no more than 5% of the school's test takers for that test or five students, whichever is greater, and when such errors are detected within four months of the test date, the superintendent of a public school district or the chief administrative officer of a nonpublic or charter school may arrange for the corrected score to be recorded in the student's permanent record. However, in all such occurrences, the superintendent or chief administrative officer must advise OSA in writing that the student's score has been corrected. The written notification to the Department must be signed by the superintendent or chief administrative officer and must include the initials or student identification numbers (at the discretion of the principal) of the students whose scores have been corrected, the name of the test, the students' original and corrected scores, and a brief explanation of the nature of the scoring error which was corrected.

If an administrator has substantial reason to believe that the teacher scoring committee has failed to accurately score more than 5% or five student answer papers, whichever is greater, on any test or when such errors are detected more than four months after the test date, the administrator must first obtain permission in writing from OSA before arranging for or permitting a rescoring of student papers. The written request to OSA must come from the superintendent of a public school district or the chief administrative officer of a nonpublic or charter school and must include the test title, date of administration, and number of students whose papers would be subject to such rescoring. This request must also include a statement explaining why the administrator believes that the teacher scoring committee failed to score appropriately and, thus, why he or she believes rescoring the test papers is necessary. As part of this submission, the school administrator must make clear his or her understanding that such extraordinary re-rating may be carried out only by a full committee of teachers constituted in accordance with the scoring guidelines presented in this manual and fully utilizing the scoring materials for this test provided by the Department.

The Department sometimes finds it necessary to notify schools of a revision to the scoring key and rating guide for a test. Should this occur after the scoring committee has completed its work, the principal is authorized to have appropriate members of the scoring committee review students' responses only to the specific question(s) referenced in the notification and to adjust students' final test scores when appropriate. Only in such circumstances is the school not required to notify or obtain approval from the Department to correct students' final test scores.

Reporting Irregularities and/or Misadministrations

Pursuant to Section 102.3 of the Regulations of the Commissioner of Education, "Building principals are responsible for administering department examinations and maintaining the integrity of examination content and programs, in accordance with directions and procedures established by the commissioner." Accordingly, the building principal is responsible for all aspects of the school's test administration and must take appropriate measures both to prevent, as much as possible, and to investigate all security breaches and irregularities associated with the administration and scoring of the test. In addition, the principal must report the following testing irregularities and misconduct by students, in writing on school letterhead and signed by the principal, to OSA via fax to 518-474-1989 or by e-mail to emscassessinfo@nysed.gov:

- All student infractions of the Department's policy prohibiting the possession or use of cell phones and other communications devices during State tests.
- All confirmed cases of students cheating.
- All interruptions of test sessions including those caused by power outages or fire alarms.
- All instances in which a State test is administered without Department authorization on a date outside the published statewide administration or makeup schedule.
- All instances in which scorers do not rate State tests in accordance with the scoring materials provided by the Department.
- All cases in which student test books or answer sheets are lost prior to either the scoring of the tests or submission of the answer sheets to the RIC or large-city scanning center.
- All instances of school officials or staff members providing students with other nonstandard test administrations, unrelated to cheating.

The report must include:

- The school's BEDS Code,
- The name and grade-level of the test,
- A brief description of the incident,
- The number of students affected, and
- The New York State Student Identification System (NYSSIS) ID numbers of affected students.

Mandatory Reporting of Testing Improprieties by Adults

The Department's Test Security Unit (TSU) handles all reports of testing improprieties by adults involved in the administration and scoring of State tests. School officials and personnel are required to report any incident of testing misconduct by an educator or other adult involved in testing. Reports should be made via the TSU web site at http://www.highered.nysed.gov/tsei/ by submitting the incident report form located on the main page under "Report Educator Test Fraud."

No adverse action, including dismissal and any disciplinary action, may be taken against an employee who files a mandatory report of testing misconduct, because the employee filed a report. Anyone who takes such unwarranted adverse action against another employee may face disciplinary action by the Department.

Examples of Improper Testing Conduct Reported to the TSU

- All suspected or confirmed cases of a school official or staff member giving aid or impromptu lessons on specific test content to students immediately before or during a State test or altering student responses on a test paper.
- All cases in which a school official does not adhere to the Department policy concerning the finality of test scores as determined by the teacher scoring committees. This policy is

explained on page 38 of this manual under the heading “Finality of Teacher Scoring Committee’s Scores.”

- All instances of an administrator or teacher instructing another administrator or teacher to alter or interfere with a student’s test score.

Coding of Invalid Tests

Any breaches or irregularities described on the previous page, except interruptions caused by power outages or alarms, may be determined by the school or by the Department to invalidate a student’s test results. In cases where a student’s test has been invalidated the principal must:

1. Darken the circle on the affected student’s answer sheet denoting “administrative error.”
2. Notify the RIC or large-city scanning center of the administrative error. In order to expedite accurate reporting, provide the BEDS Code, School Name, Subject, Grade, and NYSSIS ID number.
3. In the SIRS, in the *Assessment Standard Achieved Code* field, code the student’s test result as “administrative error with *Standard Achieved Code* of 97.”
4. If a student’s test is deemed to be an administrative error **after** the student’s answer sheet has been scanned, the scanning center must be contacted and asked to submit a request to the Department’s Office of Information and Reporting Services for permission to override the score to an Assessment Standard Achieved Code of “97” indicating administrative error.

On the verification reports, a student for whom an administrative error occurred will not receive a valid score and will appear as “not tested.”

Circumstances that Should Not Be Reported as Administrative Error

If a scanning center sends an answer sheet that contains inaccurate demographic data, do not darken the circle denoting an administrative error on the answer sheet. Instead, communicate the problem to the scanning center, go back into the student management system (SMS), correct the demographic data, and reload it into SIRS. If the student uses a blank/extra answer sheet in place of the preprinted answer sheet with incorrect demographic data, do not code the original answer sheet as an administrative error. Instead, communicate the problem to the scanning center but do not submit the incorrect answer sheet for processing.

If a scanning center sends an answer sheet to the school for a student who is no longer enrolled in that school, do not code the answer sheet as an administrative error. Instead, communicate the problem to the scanning center and go back into the SMS to correct the enrollment record to reflect the ending enrollment and reload it into the SIRS.

Students originally reported with an incorrect grade-level should not be reported as administrative error as long as the student is administered the correct grade-level test using a blank answer sheet for the appropriate grade-level test. Do not submit the incorrect answer sheet to the scanning center. Instead, communicate the problem to the scanning center, correct the student information in the SMS, and reload the updated demographic information into SIRS.

Schools should communicate any concerns or questions to the RIC or large-city scanning center prior to, or at the time of, delivery of the answer sheets.

Appendix I

Materials Needed to Administer the Performance Test, Form A

The Department will provide the test booklets, rating guides, and other printed administration materials. Schools are responsible for obtaining the materials needed for the performance tasks. Schools can either prepare these materials or purchase the materials in a complete kit from one of several suppliers. A list of approved suppliers is provided in Appendix VII. A list of materials that will be needed for *one* setup for each of the three stations appears below.

Station 1 — Measuring Objects and Liquids
Materials needed for *one* station:

- 1 equal-arm balance
- 1 set of gram masses (mixture of two 20-g, three 10-g, four 5-g, and ten 1-g for a total of 100 g)
- 3 clear plastic jars, approximately 125-mL capacity
- 2 screw tops to fit jars
- 1 large plastic cup, approximately 300-mL capacity containing about 150 mL of water
- 1 measuring container (beaker), 100-mL capacity with clearly marked gradations
- 1 rough-cut rock (about 1" cube) that will fit easily into the beaker and sink completely in the water without causing the water to overflow
- 1 resealable plastic bag, large enough to hold the set of gram masses
- 1 ruler with units for metric (30 cm) and for standard (12 inches) measurement, neither with indented zero points
- 2–3 paper towels
- Station Diagram for Station 1

Teacher materials:

- 1 black, permanent, fine-line marker
- supply of water for 10 Station 1 setups
- medicine cup or other tool to measure 25 mL of water as accurately as possible

Station 2 — Electrical and Magnetic Testing
Materials needed for *one* station:

- electrical tester:
  - 1.5-volt “D” cell battery
  - 1.5-volt bulb and bulb holder
  - battery holder (plastic or metal recommended)
  - 3 insulated wires with clips
- bar magnet (approximately 1.5 cm x 7 cm)
- resealable plastic bag containing eight objects and labeled “Test Objects”
  - penny
    (**Note:** Penny must be new and shiny. Oxidized pennies will not conduct electricity.)
  - rubber band (at least 1/4 inch wide)
  - paper clip (all metal)
  - plastic spoon (small)
  - nickel (United States five cents)
  - wooden stick (like Popsicle stick or tongue depressor)
  - aluminum foil (heavy duty, about 5-cm square)
  - colored ceramic disk (magnetic)
    (**Note**: Ceramic materials are nonmetallic, even if they are magnetic.)
- Station Diagram for Station 2

Station 2 (continued)

Teacher materials:

- 1 black, permanent, fine-line marker
- extra batteries and bulbs for the electrical testers

Station 3 — Ball and Ramp

Materials needed for *one* station:

- Wood block (preferably a cube) to serve as the ramp support (total height: 5–6 cm)
- 1 ruler, 30-cm plastic without an indented zero mark and with a grooved center that can accommodate a golf ball
- 1 transparent, round, plastic deli container about 12-cm diameter, 1 pint in volume, and approximately 15 grams in mass
- 1 golf ball in a resealable, clear plastic bag labeled “Golf Ball”
- 1 Ping-Pong ball in a resealable, clear plastic bag labeled “Ping-Pong Ball” (Do *not* put the Ping-Pong ball at the station.)
- 1 Ball and Ramp Place Mat (see Appendix IV for template)
- Station Diagram for Station 3

Teacher materials:

- 1 black, permanent, fine-line marker
- 1 pair of scissors or craft knife
- 1 roll double-sided carpet tape or duct tape
- 1 set of self-adhesive colored dots for top of the containers (one dot for each container)
- 1 roll of masking tape

Appendix II

Comparison of Possible Performance Test Sites

SITE: CLASSROOM	
Advantages	*Disadvantages*
▪ Ease of station preparation ▪ Furniture already at site ▪ Good station-to-station movement ▪ Only classroom teacher and students will be disrupted ▪ Secure location	▪ Need to relocate the teacher and students whose room is being used for the duration of the testing ▪ Individual student desks may be too narrow for the ball and ramp station unless they are at least 36 inches wide
SITE: LIBRARY	
Advantages	*Disadvantages*
▪ Large space ▪ Tables and chairs at site ▪ Secure location	▪ May disrupt more teachers and students than classroom site ▪ Library unavailable for other uses during testing
SITE: CAFETERIA	
Advantages	*Disadvantages*
▪ Large space ▪ Tables and chairs at site	▪ May disrupt large numbers of teachers and students ▪ Unavailable for other uses during testing ▪ Poor security ▪ Breakfast/lunch program may interrupt the testing ▪ Poor acoustics and high noise levels ▪ May need to disassemble and reassemble stations before and after lunch
SITE: SCIENCE ROOM	
Advantages	*Disadvantages*
▪ Large space ▪ Tables and chairs at site ▪ Secure location ▪ Science materials on site	▪ May disrupt more teachers and students than classroom site
SITE: GYMNASIUM	
Advantages	*Disadvantages*
▪ Large space	▪ May disrupt large numbers of teachers and students ▪ Need to move tables or desks and chairs into space ▪ Poor security ▪ Poor acoustics ▪ Not a familiar testing site for students ▪ May need to disassemble and reassemble stations to accommodate physical education classes

Appendix III

Test Administrator's Record Sheet
Grade 4 Elementary-Level Science Performance Test, Form A

This record sheet should be completed by the person(s) administering the Performance Test. At the conclusion of the test administration, return this completed record sheet with the student test booklets to the person in charge of the testing program for the school. This record sheet is very important because it will be used to determine the range of correct answers by the teachers rating the test. It should be kept with the test booklets.

Test Administrator(s) _____ Date _____

School Name _____ School District _____

Station 1 — Measuring Objects and Liquids

Complete the measurements and calculate acceptable ranges in the table below according to the directions for each item to be measured. There will be up to ten Station 1 setups in the testing room. It is important that the directions for preparation (pages 25–26) be followed carefully so that the acceptable ranges will apply to all ten setups.

Location in Student Booklet	Item to Be Measured	Actual Measurement by Administrator during Set-up	Directions for Calculating Acceptable Range	Acceptable Range for Student Responses
1a	Jar 1 inside width	____ cm (to the nearest 0.1 cm)	± 0.5 cm For example, the acceptable range for a measurement of 5.2 cm is 4.7– 5.7 cm.	_____ to _____ cm
1b	Jar 1 inside height	____ in (to the nearest 1/8 inch)	± ¼ in For example, the acceptable range for a measurement of 2 ⅝ inches is 2 ⅜–2 ⅞ inches; the acceptable range for a measurement of 2 ½ inches is 2 ¼–2 ¾ in.	_____ to _____ in
2	Volume of water to line on Jar 1 (must be 65 mL)	____ mL	The acceptable range is the 10-mL interval on the beaker in which the actual measurement falls. For example, the acceptable range for a measurement of 63 mL is 60–70 mL. **Note:** Do *not* use ±5 mL as the acceptable range. The gradations on the beaker do not allow this much precision.	_____ to _____ mL
4a	Mass of Jar 2 with cover and water	____ g	±3 g	_____ to _____ g
4b	Mass of Jar 3 with cover (empty jar)	____ g	±3 g	_____ to _____ g

Test Administrator's Record Sheet
Grade 4 Elementary-Level Science Performance Test, Form A (page 2)

Note: If any materials used during the test administration were different from those specified in Appendix I or if the administration directions were not followed exactly as written, note these differences below. Be specific. These variations can be important when scoring the students' test booklets.

Appendix IV

Station 3—Ball and Ramp Place Mat

The place mat on the next page should be reproduced on 8½" x 11" paper and laminated. In most cases, these place mats will be supplied in the performance test kits.

End of Ruler Placement

End of Ruler Placement

Starting Circle

Finish Line

Ramp Place Mat

Appendix V

Test Storage Certificate

Deputy and Proctor Certificate

Test Scoring Certificate

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Office of State Assessment
Albany, New York 12234

TEST STORAGE CERTIFICATE

Grade 4 Elementary-Level Science Test

School Name: _____ ☐ Performance Test

Test Date: _____ ☐ Written Test
(Month/Year)

I, the undersigned principal of the school named above, do hereby declare that each of the security procedures listed below was fully and faithfully observed for the current administration of the 2017 Grade 4 Elementary-Level Science Test.

1. The shrink-wrapped packages of secure test materials were stored in the secure location indicated on the Test Storage Plan submitted to the Department for the above test date period.
2. The secure location was maintained under strict security conditions.
3. An inventory of the test materials was conducted as soon after delivery as was practical. The Department was notified in writing if any of the packages of secure test materials were not properly shrink-wrapped when received. The shrink-wrapped packages of secure test materials were replaced inside the secure location immediately after the inventory was completed.
4. The shrink-wrapped packages of secure materials were not removed from the secure location, except for the inventory of test materials shipped to the school, until the day on which the test was scheduled to be administered.
5. The shrink-wrapped packages of secure test materials were not opened until the day on which the test was scheduled to be administered.
6. Following testing, test booklets and answer sheets were collected and stored in a secure location.

Name of Principal (print or type): _____

Signature of Principal: _____ Date: ____/____/____

After completion, retain in school files for one year.

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Office of State Assessment
Albany, New York 12234

DEPUTY AND PROCTOR CERTIFICATE

Grade 4 Elementary-Level Science Test

School Name: _____ ☐ Performance Test

Test Date: _____ ☐ Written Test
(Month/Year)

We, the undersigned deputies and proctors who assisted in the administration of the 2017 Grade 4 Elementary-Level Science Test, hereby declare our belief in the correctness of the following:

The rules and regulations for administering the test were fully and faithfully observed, and in particular:

1. The rules for administering the test were read to or read by each person who assisted in administering the test.
2. The test was administered within the prescribed dates.
3. The secure test materials were kept in the shrink-wrapped packages until the administration date.
4. The students were given appropriate instructions and orientation before beginning the test.
5. The students were so seated as to prevent collusion.
6. Adequate supervision was maintained throughout the administration of the test.
7. The answer papers were collected from the students immediately at the close of the test.
8. All test books and answer sheets for the test were collected and returned to the principal for storage in a secure location after testing.

	Print Name	Signature	Test Proctored	Test Room
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

(Make additional copies as necessary.)

After completion, retain in school files for one year.

The University of the State of New York
THE STATE EDUCATION DEPARTMENT
Office of State Assessment
Albany, New York 12234

TEST SCORING CERTIFICATE

Grade 4 Elementary-Level Science Test

School Name: _____ ☐ Performance Test ☐ Written Test

City or Town: _____ Test Date: _____
(Month/Year)

As one of the undersigned raters who participated in the scoring of the Grade 4 Elementary-Level Science Test (***each*** participating rater ***must*** sign below), I hereby declare my belief in the correctness of the following statement:

The rules and guidance materials for rating the test were fully and faithfully observed, and in particular:

1. As a rater, I was trained using the procedures and materials described in the *Grade 4 Elementary-Level Science Test Manual for Administrators and Teachers*, the Rating Guide for the Written Test Part II, and the Rating Guide for the Performance Test.
2. The rating committee, of which I was a member, included the required minimum number of raters as specified in the *Grade 4 Elementary-Level Science Test Manual for Administrators and Teachers*.
3. Test questions were assigned to me for rating according to the procedures described in the *Grade 4 Elementary-Level Science Test Manual for Administrators and Teachers.*
4. As a rater, I did not rate any of my own students' responses.
5. Where required, my name or initials were clearly recorded on the answer paper or scoring record.
6. The answer papers and test booklets were safeguarded while scoring was occurring.

1.	_____	11.	_____
2.	_____	12.	_____
3.	_____	13.	_____
4.	_____	14.	_____
5.	_____	15.	_____
6.	_____	16.	_____
7.	_____	17.	_____
8.	_____	18.	_____
9.	_____	19.	_____
10.	_____	20.	_____

As principal, I attest that the rules and regulations for scoring, as listed above, were fully and faithfully observed.

Principal: _____ Date: ____/____/____

After completion, retain in school files for one year.

Appendix VI

Information on Ungraded Students

Students who are graded must take the State test for the grade level in which they are enrolled. The chart below is to be used solely to ascertain the appropriate grade-level tests to administer to ungraded students with disabilities.

Age Ranges for Testing on the NYSAA and General Assessments for Ungraded Students with Disabilities at the Elementary and Middle Levels in the 2016–2017 School Year

Assessment	Birth Date	Reaches Age Given Between September 1, 2016 and August 31, 2017
Grade 3 English Language Arts, Mathematics	September 1, 2007–August 31, 2008	9
Grade 4 English Language Arts, Mathematics, Science	September 1, 2006–August 31, 2007	10
Grade 5 English Language Arts, Mathematics	September 1, 2005–August 31, 2006	11
Grade 6 English Language Arts, Mathematics	September 1, 2004–August 31, 2005	12
Grade 7 English Language Arts, Mathematics	September 1, 2003–August 31, 2004	13
Grade 8 English Language Arts, Mathematics, Science	September 1, 2002–August 31, 2003	14

Appendix VII

Suppliers for Grade 4 Elementary-Level Science Performance Test Kits

The Grade 4 Elementary-Level Performance Test, Form A, will be given during the designated administration period. This is the same performance test that has been administered since 2004. A new kit will not be needed. The suppliers below can be contacted if replacement materials or additional kits are needed.

Kathy Arminio, Director
Elementary Science Program
Monroe #2 - Orleans BOCES
38 Turner Drive
Spencerport, NY 14559
585-352-1140
800-832-8011
E-mail: karminio@monroe2boces.org
Web site: www.espsciencetime.org

Dr. Charlene Jordan
Director of Professional Development
and Instructional Support
Rockland BOCES
65 Parrott Road
West Nyack, NY 10994
Office Phone: 845-627-4725
Office Fax: 845-623-3343
E-mail: cjordan@rboces.org

Mr. Geof Smith
Ward's Science
5100 West Henrietta Road
PO Box 92912
Rochester, NY 14692-9012
800-962-2660 x309416
Office Phone: 585-321-9416
Cell: 585-260-7266
E-mail: geof.smith@vwr.com
Web site: http://www.wardsci.com

Frey Scientific
80 Northwest Boulevard
Nashua, NH 03063

Mr. Rod Gusman, Science Category Sales Manager
Territory Coverage – NY City, Long Island, Southern, Central, & Western NY Counties
Cell: 908-578-5901
E-mail: rod.gusman@schoolspecialty.com

Customer Service: 800-225-3739
www.freyscientific.com

Mr. Jon DiVito, Science Category Sales Manager
Territory Coverage – Albany County Area & Counties North
Cell: 508-868-5132
E-mail: jon.divito@schoolspecialty.com

Customer Service: 800-225-3739
www.freyscientific.com

Appendix VIII

Performance Levels Chart
New York State Grade 4 Elementary-Level Science Test

The chart on the next page defines the four performance levels for this test. The state-designated level of performance for this test is a final score of 65 or higher (level 3 and 4). Students scoring below 65 (levels 1 and 2) must be provided with academic intervention services or Response to Intervention according to Section 100.2(ee) of the Regulations of the Commissioner of Education. The chart provides the final score range and a brief description of student performance for each level.

Performance Levels for Final Score
Grade 4 Elementary-Level Science Test

Level	Final Test Score Range	Description of Student Performance
4	85–100	**Meeting the Standards with Distinction** • The student demonstrates superior understanding of elementary-level science content and concepts for the learning standards and key ideas being assessed. • The student demonstrates superior elementary-level science skills related to the learning standards and key ideas being assessed. • The student demonstrates superior understanding of the science content, concepts, and skills required for an elementary-level academic environment.
3	65–84	**Meeting the Standards** • The student demonstrates understanding of elementary-level science content and concepts for the learning standards and key ideas being assessed. • The student demonstrates elementary-level science skills related to the learning standards and key ideas being assessed. • The student demonstrates understanding of the science content, concepts, and skills required for an elementary-level academic environment.
2	45–64	**Not Fully Meeting the Standards** • The student demonstrates only minimal understanding of elementary-level science content and concepts for each of the learning standards and key ideas being assessed. • The student demonstrates minimal elementary-level science skills related to the learning standards and key ideas being assessed. • The student demonstrates minimal understanding of the science content, concepts, and skills required for an elementary-level academic environment.
1	0–44	**Not Meeting the Standards** • The student is unable to demonstrate understanding of elementary-level science content and concepts for the learning standards and key ideas being assessed. • The student is unable to demonstrate elementary-level science skills related to the learning standards and key ideas being assessed. • The student is unable to demonstrate understanding of the science content, concepts, and skills required for an elementary-level academic environment.

New York State

Grade 4

Elementary-Level

Science Test

Manual for Administrators and Teachers

2017 Written Test

Performance Test, Form A